4.21 Income

NLSY79

This section describes the income questions asked to NLSY79 respondents since the cohort's inception. The NLSY79 cohort is a unique source of income information. Because the original NLSY79 panel contained a supplemental sample of 5,295 economically disadvantaged, non-black youths, researchers are able to precisely measure income of low-income and minority households. Moreover, because in-depth income questions have been asked since 1979, detailed age/income profiles can be traced over time.

Most NLSY79 income questions refer to the previous calendar year. For example, if the survey is being fielded in 1992, most questions ask the respondent to report how much they earned during the 1991 calendar year. A summary of the questions asked in the early surveys is shown in Tables 4.21.1 and 4.21.2. During each of the first four surveys (1979–82) NLSY79 respondents were examined to see if they met one of following five criteria:

- 18 years old or greater
- Had a child
- Enrolled in college
- Married
- Living outside their parents' home

If they did not meet any of these five criteria, respondents were asked the simple income section outlined in Table 4.21.1. However, if respondents fell into one of these five categories, the interviewer asked a more detailed set of questions outlined in Table 4.21.2.

Table 4.21.1 Short Form NLSY79 Income Questions: 1979-82

Question	79	80	81	82
Income from Wages, Salary, Tips	*	*	*	*
Unemployment Compensation		*	*	*
Income from Other Sources	*	*	*	*
Live in Subsidized Housing?	*		*	*

Table 4.21.2 Long Form NLSY79 Income Questions: 1979–82

Question	79	80	81	82
Military Income	*	*	*	*
Wages, Salary, Tips	*	*	*	*
Net Business Income	*	*	*	*
Net Farm Income	*	*	*	*
Unemployment Compensation	*	*	*	*
Child Support, Alimony	*	*	*	*
AFDC Payments	*	*	*	*
Food Stamps	*	*	*	*
Supplemental Security Income (SSI)	*	*	*	*
Other Welfare			*	*
Educational Benefit, Scholarship	*	*	*	*
Disability, Veteran Benefits		*	*	*
Parental, Relative Support	*	*	*	*
Other Income (Interest, Dividends, Rent)	*	*	*	*
Income Other Household Members	*	*	*	*

Beginning in 1983, the NLSY79 questionnaire used the same set of income questions for all respondents, since all respondents would have been at least 18 years old and thus sent through the long series of questions. In this set of questions, all respondents are asked about income from a variety of sources, as shown in Table 4.21.3. First, they report how much money they received from working; questions are asked about their military income, wages, salaries, tips, farm income, and business income. Then respondents provide information about transfers from the government through programs such as unemployment compensation, AFDC payments, food stamps, SSI, and other welfare payments. Respondents are then queried about transfers from non-government sources such as child support, alimony, and parental payments. Finally, respondents report income from other sources such as scholarships, V.A. benefits, interest, dividends, and rent.

User Notes: Researchers interested in the income of a respondent's spouse or partner are cautioned that, until 1994, the survey contained separate sets of questions for spouses and partners. This means that researchers who are trying to compute the couple's income need to check answers to both spouse wages and partner wages. After 1994, the CAPI questionnaire combined these sets of questions into one. Hence, users not wanting partner's income data should examine the wording of income source questions carefully.

Table 4.21.3 Detailed NLSY79 Income Questions 1983–2000

Question	83	84	85	86	87	88	89	90	91	92	93	94	96	98	00
Military Income	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wages, Salary, Tips	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Net Business Income	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Net Farm Income	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unemployment Compensation	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Receive Child Support, Alimony	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pay Child Support, Alimony	*	*	*	*	*	*									
Pay Child Support													*	*	*
AFDC Payments	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Food Stamps	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Welfare and SSI	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Education Benefit/Grant	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Disability, VA Benefits	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Inheritance, Gifts						*	*	*	*	*	*	*	*	*	*
Parent, Relative Support	*	*	*	*	*	*									
Other (Interest, Dividends, Rent)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Income Other HH Members	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rental Subsidy	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Nonresponse: One major concern when asking individuals about their income holdings is nonresponse bias. While it is outside the scope of this section to fully investigate nonresponse bias in the NLSY79, this section briefly describes nonresponse in 1992 as an example. Researchers interested in a fuller discussion of nonresponse should consult Chapter 5 of this guide. There are two primary types of questions on income: general questions asking whether the respondent received income from a particular source and specific questions on the amount of income. Factors that are likely to contribute to nonresponse are suspicion, uncertainty, shared responsibility for family finances, and complex financial arrangements.

Table 4.21.4 provides information on response rates to income questions in 1992. The table is divided into three sections. The first section shows the response rates for questions asked about the respondent. The second and third sections show the response rates for the spouse and partner, respectively. The average response rates (99.9 percent) in the receipt column show that almost every NLSY79 respondent will tell the interviewer if they received income from a particular source. Additionally, the amount column, which is calculated based only on individuals who received a particular type of income, also shows high response rates. Except for alimony payments (54 percent), more than 90 percent of all NLSY79 respondents knew and were willing to divulge how much they earned from various sources.

Examining the sections labeled "Spouse's Income" and "Partner's Income" shows a very different picture. Spouse's income is known with less certainty and partner's income with much less certainty than the

respondent's income. For example, 91.9 percent of the respondents reported how much they earned from their own business or farm. However, these same individuals were able to report only 85.6 percent of the earnings of spouses and only 59.7 percent of their partner's income from the same source.

Table 4.21.4 Response Rates to Questions on Income: NLSY79 1992

	Receipt	Amount
Respondent's Income		
Military Income	99.9	99.4
Wages/Salaries/Tips	_	97.8
Business/Farm	99.9	91.9
Unemployment Benefits	99.9	97.8
Alimony	99.7	54.0
Child Support	99.8	96.8
AFDC	99.9	97.0
Food Stamps	99.9	97.5
SSI/Public Assistance	99.9	93.5
VA Benefits/Disability	99.9	95.8
Spouse's Income		
Military Income	99.8	95.7
Wages/Salaries/Tips	_	95.6
Business/Farm	99.4	85.6
Unemployment Benefits	99.8	91.9
Partner's Income		
Military Income	99.5	56.1
Wages/Salaries/Tips	_	71.8
Business/Farm	96.7	59.7
Unemployment Benefits	96.2	_

Top Coding: Because the NLSY79 is a public use data set distributed widely throughout the research and public policy communities, the survey takes extensive measures to protect the confidentiality of respondents. One method of ensuring confidentiality is to "top code" unusually high income values. The NLSY79 top code values were originally designed to prevent identification of the top two percent of respondents.

The NLSY79 has used four top coding algorithms for income. (1) From 1979 to 1984, every NLSY79 income question that elicited a response above \$75,000 was truncated to \$75,001. (2) From 1985 to 1988, the values were increased to \$100,000 and \$100,001 respectively. Unfortunately, this algorithm results in a sharp downward bias in the mean value of NLSY79 income holdings since the entire right hand tail is truncated. (3) To fix this problem, a new algorithm was introduced beginning in 1989. The new top code algorithm replaced all values above the cutoff with the average of all outlying values. (4)

Beginning in 1996, another new algorithm was used. This algorithm takes the top two percent of respondents with valid values and averages them. That averaged value replaces all values in the top range.

Top coding primarily affects seven of the NLSY79 income variables. The seven variables that are top coded include the income from respondent's wages, respondent's business, spouse's wages, spouse's business, partner's wages, rest of the family, and other sources such as rents, interest, and dividends.

A second issue with NLSY79 data concerns individuals living outside the U.S. Living outside the U.S. does not preclude a respondent from being interviewed. For example, in 1992, 125 respondents lived abroad. Between 1989 and 1992, for people who hold assets denominated in foreign currency, little effort was made to transform these assets into dollar figures. Instead, such values are classified as "invalid skips" in the data. Beginning in 1993, an effort was made to convert these currencies whenever the unit in which the response was made could be determined. While researchers are warned that this occurs, relatively few individuals live outside the U.S.

Created Variables and Summary Statistics: Each year, the CHRR staff creates an NLSY79 variable entitled "Total Net Family Income." This variable is designed to provide researchers with a summary variable of all the income received in the household. The actual computer code used to create this variable is found in Appendix 2 of the *NLSY79 Codebook Supplement*. Appendix 2 shows that each year a slightly different program is used to compute net family income. However, these programs all have a similar structure. For example, the 1992 net family income variable is created by:

- Initializing 19 different income categories to valid skip (-4).
- Examining various demographic variables such as military status to see which of the 19 categories can be automatically classified as zero.
- Counting the number of months a respondent or partner participated in a government aid program, such as AFDC or Food Stamps. Multiplying the number of months of participation by the average weekly/monthly benefit to create total yearly income from that source.
- Summing all 19 components to form total net family income. If any component is
 MISSING, REFUSED, or UNKNOWN, then set total net family income to MISSING,
 REFUSED, or UNKNOWN. Hence, if the respondent knows how much they received from
 all sources except for one, the net family income variable will be coded as missing.
- No items are subtracted from the 'Net Family Income' variables to account for taxes or other adjustments.

Researchers should note that in the survey years from 1979 to 1986, total net family income was created a little differently than from 1987 to present. In the early years when many of the NLSY79 respondents were younger and living in the parental household, the parent was given the *Household Interview* (Version A). These interviews obtained income from all household members related by blood or marriage. If

Version A was used, then the total net family income program picked up income from the *Household Interview*, and the component income variables from the income section of the questionnaire were ignored. Usually, if the parent completed the *Household Interview*, then the youth respondent went through a limited set of income questions that would not allow for the creation of total net family income. If Versions B or C of the *Household Interview* were given, then the respondent went through the income section and the program picked up the component income variables. Beginning in 1987, the three versions of the *Household Interview* were reduced to one (Version C) and all respondents go through the income section regardless of whether or not they are living in the parental household.

User Notes: Partner income and earnings are not included in the constructed "Net Family Income" variable.

Survey Instruments: The income variables are found in the following sections of the questionnaires: Section 11 (1991, 1993), Section 12 (1981, 1987, 1989, 1990, 1992), Section 13 (1983, 1986, 1994–2000), Section 14 (1982, 1985), Section 15 (1984, 1988), Section 17 (1980), and Section 21 (1979).

Data Files: Interested users should examine the "Income" area of interest for these variables.

NLSY79 Children

A small amount of income information is gathered for the NLSY79 children. In 1988–2000 in the *Child Self-Administered Supplement*, children 10 years of age and older were asked who made decisions about spending their money. Children were able to state if they, their mother, father, or another individual primarily made the decisions. In 1990–2000, children were asked if they worked for pay doing jobs like baby sitting, yard work, or fast-food worker. Children who answered yes were asked how much money they earned and how many hours they worked in a typical week.

More detailed income information is gathered from young adults. Their income section, which began with the first survey in 1994, is patterned after the main NLSY79 section. Young adults are asked about income from the military, wages, salaries, commissions, farm work, and businesses. Additionally, respondents are asked about income received from government programs including unemployment compensation, AFDC, food stamps, public assistance, welfare, WIC, G.I. Bill, disability, and other payments. The questionnaire also asks for detailed data about the receipt of child support payments.

Survey Instruments: The Children of the NLSY79 income information is found in the Child Self-Administered Supplement for all survey years. The young adult income questions are located in Section 15 of the questionnaire.

4.22 Industries

This section overviews the raw and created industry variables available for the NLSY79 main cohort and the NLSY79 Children and Young Adult groups.

NLSY79

Two sets of variables are available for each survey year (1979–2000) that provide information on the type of industry in which a respondent worked. Verbatim responses to questions such as "What kind of business or industry is this? What do they make or do?" have been recorded within the NLSY79 questionnaires and *Employer Supplements* during each year's survey. Coding of responses is performed at NORC using the 1970 and, for the CPS job only, the 1980 Census industrial classification systems (Census 1971, 1980). The Census system consists of the 14 industry groups, representing more than 19,000 industries.

Beginning in 1994, NLSY79 CAPI surveys are preloaded with the last industry and occupation. To reduce errors and save on the amount of coding, each respondent is asked if the industry and occupation reported last time is still correct. Only if the respondent states this information is no longer correct, is the industry or occupation recoded.

Figure 4.22.1 Major Industrial Groups: 1970 Census of Population

Agriculture, Forestry, and Fisheries

Mining

Construction

Manufacturing - Durable Goods

Manufacturing - Nondurable Goods

Transportation, Communications, and Other Public Utilities

Wholesale Trade

Retail Trade

Finance, Insurance, and Real Estate

Business and Repair Services

Personal Services

Entertainment and Recreation Services

Professional and Related Services

Public Administration

The first set of NLSY79 variables, 'Type of Business or Industry of Most Recent Job (CPS Item),' reflects the industry for the current or most recent job of those respondents who reported working for pay since the last interview. Included are those whose survey week activity was "working" as well as respondents who were unemployed or out of the labor force during the survey week but who had worked for pay since the last interview. The 1970 Census classification system is used to code industry information from the 1979–2000 surveys; industries of a respondent's most recent job identified during the 1982–2000 surveys

are doublecoded with the 1970 and 1980 Census codes. A second set of variables, 'Type of Business or Industry Job #1–5,' codes the industry of up to five jobs including the CPS job (generally considered to be Job #1) in which the respondent worked since s/he was last interviewed. Industry is not re-collected for the CPS job during the administration of the *Employer Supplements*. After 1993 all job specific information was removed from the CPS section and is only collected in the *Employer Supplements*. This set of variables is coded using only the 1970 Census classification system.

Tables 4.22.1 and 4.22.2 give the number of respondents in each category in each survey year by gender.

Table 4.22.1 Industrial Sector of Civilian Respondents' Most Recent Job by Survey Year: NLSY79 Males 1979–2000

						In	dustrial	Sector						
Survey Year	Agriculture, Forestry, Fisheries	Mining	Construction	Manufacturing (Durable)	Manufacturing (Nondurable)	Transportation, Communication, & Public Utilities	Wholesale & Retail Trade	Finance, Insurance, & Real Estate	Business & Repair Services	Personal Services	Entertainment & Recreation Services	Professional & Related Services	Public Administration	All Males
1979	195	19	216	331	229	94	913	45	196	126	64	253	66	2747
1980	174	31	242	392	233	125	1018	63	221	99	75	290	70	3033
1981	164	54	287	423	265	151	1043	90	246	98	68	362	90	3341
1982	308	87	472	589	378	248	1339	109	398	172	126	467	205	4898
1983	306	85	497	515	404	267	1314	124	426	176	132	500	190	4936
1984	228	87	476	778	518	237	1054	130	450	228	120	480	219	5005
1985	191	78	591	647	396	276	1118	141	410	138	74	441	172	4673
1986	189	61	583	645	407	312	1031	176	415	106	73	432	203	4633
1987	189	34	580	616	455	349	898	163	457	164	81	396	202	4584
1988	195	60	601	620	444	376	890	187	424	114	91	425	241	4668
1989	183	37	644	687	425	389	883	201	408	115	76	464	203	4715
1990	176	49	625	674	409	390	869	196	423	100	71	440	234	4656
1991	159	34	555	547	357	361	738	175	349	87	73	402	207	4044
1992	180	49	502	533	365	344	665	168	401	87	60	427	255	4036
1993	164	28	548	517	357	343	652	173	353	89	51	452	248	3975
1994	141	27	501	482	351	359	603	164	357	89	44	446	261	3825
1996	143	33	513	507	340	369	585	155	392	89	53	438	261	3878
1998	134	27	490	532	314	415	539	157	371	74	64	429	260	3806
2000	118	20	484	469	305	408	540	160	363	62	63	416	245	3653

Universe: Respondents who reported working for pay since the last interview and for whom an industry code from the 1970 Census classification system was assigned.

Note: Data from 1979 to 2000 are based on 1970 S.I.C. codes.

Table 4.22.2 Industrial Sector of Civilian Respondents' Most Recent Job by Survey Year: NLSY79 Females 1979–2000

						In	dustrial	Sector						
Survey Year	Agriculture, Forestry, Fisheries	Mining	Construction	Manufacturing (Durable)	Manufacturing (Nondurable)	Transportation, Communication, & Public Utilities	Wholesale & Retail Trade	Finance, Insurance, & Real Estate	Business & Repair Services	Personal Services	Entertainment & Recreation Services	Professional & Related Services	Public Administration	All Females
1979	49	7	19	117	179	44	883	149	53	310	40	496	74	2420
1980	33	5	26	156	209	63	988	195	79	235	38	613	78	2718
1981	29	7	13	165	233	78	981	241	83	221	43	787	115	2996
1982	76	17	43	232	355	123	1444	310	165	297	87	1038	203	4390
1983	80	14	33	201	360	120	1405	347	177	363	78	1075	231	4484
1984	77	16	49	291	423	132	1152	328	227	395	114	1092	237	4533
1985	55	22	40	257	371	141	1173	351	255	381	62	1083	162	4353
1986	45	15	39	256	361	138	1072	380	268	362	56	1147	219	4358
1987	54	5	45	251	385	170	959	386	289	403	60	1127	213	4347
1988	59	11	51	252	388	161	945	391	272	347	65	1155	231	4328
1989	46	10	61	278	367	172	904	369	290	370	51	1211	208	4337
1990	46	13	57	257	384	173	854	370	271	312	47	1284	223	4291
1991	38	11	43	209	269	155	696	308	214	275	53	1125	204	3660
1992	48	8	39	225	294	153	643	296	213	225	50	1179	255	3628
1993	35	9	38	195	286	163	637	288	237	268	36	1158	224	3574
1994	40	9	35	192	272	165	587	282	217	239	38	1127	236	3439
1996	42	9	44	196	262	162	623	262	222	260	47	1228	248	3605
1998	42	9	54	212	238	166	617	260	260	231	54	1291	242	3676
2000	39	8	68	209	195	181	584	253	248	197	61	1265	244	3552

Universe: Respondents who reported working for pay since the last interview and for whom an industry code from the 1970 Census classification system was assigned.

Note: Data from 1979 to 2000 are based on 1970 S.I.C. codes.

User Notes: Industry codes for the 1994 data release are in different format than other years. In the 1994 data, the industries of individuals who stayed in the same job are found in one variable while those who switched employers are found in a different variable. Users must combine the information in these two types of variables if they wish to match the industry coding of previous years. In the 1996 and later data releases, a combined industry variable is again computed for users.

Survey Instruments: The "Current Labor Force Status - CPS" section of the questionnaire collects the respondent's verbatim response, from which a code is assigned to the industry of his/her most recent job. The "Jobs" section of the 1979 questionnaire and, for subsequent years, the Employer Supplements gather information on the industries of all other jobs in which a respondent worked more than 10/20 hours per week for at least nine weeks since the date of last interview.

Data Files: The "CPS" area of interest houses the 1970 Census codes for the most recent job variables; however, the 1980 Census coding of these variables is located in the yearly "Misc. xxxx" area of interest. "Job Information" contains the variables for the industry of up to four other jobs.

User Notes: McClaskie (1988) analyzed the extent of match between the three-digit industry codes assigned during 1979–86 for respondents who had not changed jobs since the previous interview. These codes would theoretically match if no respondent or coding error was present. This analysis found two- and three-digit matches of approximately 80 percent for most years studied.

NLSY79 Children

In each survey, information has been collected from the children aged 15 and older, the young adults, on the type of industry in which they worked. Verbatim responses were recorded for the questions, "What kind of business or industry is this? What do they make or do?" Through 1998, young adult jobs were coded primarily with the 1970 Census codes to enable researchers to match industry and occupation with NLSY79 mothers. The first CPS job was also coded with the 1990 Census codes. Beginning in 2000, 1990 codes were used for all jobs, with the first CPS job also including 1970 codes. By the 2000 release, the 1994-1998 coded items will have both 1970 and 1990 codes available.

Survey Instruments: The Employer Supplement sections of the NLSY79 Young Adults Questionnaires contain the questions pertaining to the industry in which the young adult is/was employed.

References

- McClaskie, Stephen L. "NLSY79 Industry Codes." Internal Memo. Columbus, OH: CHRR, The Ohio State University, 1988.
- U.S. Census Bureau. 1970 Census of Population Classified Index of Industries and Occupations. Washington, DC: U.S. Government Printing Office, 1971.
- U.S. Census Bureau. 1980 Census of Population Classified Index of Industries and Occupations. Washington, DC: U.S. Government Printing Office, 1980.

4.23 Job Characteristics

The variables discussed in this section are limited to the 1979 and 1982 data collections for the NLSY79. Descriptions of the broader range of job characteristic data available for the NLSY79 can be found in the "Jobs & Employers" section of this guide.

NLS surveys conducted in 1979 and 1982 included a series of questions on characteristics of the respondents' current job, e.g., the amount of variety, amount of autonomy, opportunity to deal with people or develop friendships, opportunity to complete tasks, amount of significance they attributed to their job, and amount of performance feedback received. Items for this scale, the Job Characteristics Index (JCI), were developed by Sims, Szilagyi, and Keller and are an extension of the work first begun by Turner and Lawrence in 1965.

The JCI was preceded by an instrument developed by Hackman and Oldham known as the Job Diagnostic Survey (JDS), dimensions of which are also incorporated in the JCI, although in a simpler format. Comparisons of the JCI and JDS by Dunham et al. have shown that both scales tend to collapse to a one-dimensional scale measuring job complexity. Therefore, the JCI was shortened by selecting one scale item that loaded strongly on each of the dimensions of job complexity shown to be important in earlier research. In their 1976 article, Sims et al. reported the necessary factor analysis scores used to obtain the abbreviated scale. Question and reference numbers for the seven items that comprise the shortened JDI scale are listed in Table 4.23.1.

Survey Instruments: These questions are found within the "Current Labor Force Status" or "CPS" sections of each questionnaire.

Data Files: The NLSY79 variables have been placed within the "Misc. 1979" and "Misc. 1982" files.

Table 4.23.1 Variables Needed to Construct the Job Characteristics Index: NLSY79

Survey Year	Reference Numbers	Question Numbers
1979	R00481.–R00486. R00488.	Questions 23 (1–5)
1982	R07054.–R07059. R07061.	Questions 36A (1–5)

References

- Dunham, Randall B.; Aldag, Ramon; and Brief, Arthur P. "Dimensionality of Task Design as Measured by the Job Diagnostic Survey." *Academy of Management Journal* 20,2 (June 1977): 209–23
- Hackman, J.R. and Oldham, J.R. "Development of the Job Diagnostic Survey." *Journal of Applied Psychology* 60 (1975): 159–70.
- Hills, Stephen M. "The Attitudes of Union & Nonunion Male Workers Toward Union Representation." Industrial & Labor Relations Review 38,2 (January 1985): 179–94.
- Pierce, Jon L. and Dunham, Randall B. "The Measurement of Perceived Job Characteristics: The Diagnostic Survey vs. the Job Characteristics Inventory." *Academy of Management Journal* 21,1 (March 1978): 123–28.
- Sims, Henry R.; Szilagyi, Andrew; and Keller, Robert. "The Measurement of Job Characteristics." *Academy of Management Journal* 26,2 (June 1976): 195–212.

4.24 Job Satisfaction

NLSY79

Three sets of job satisfaction measures have been collected for employed respondents during select survey years. In addition, a job satisfaction index can be created using items collected during the 1979–82 and 1988 surveys.

- 1. Global Job Satisfaction 1979–2000: During each survey year, respondents employed since the last interview are asked to rate, on a four point scale from "like it very much" to "dislike it very much," how they feel about their current/most recent (CPS) job. This question provides a general or 'global' indication of a respondent's current job satisfaction. In 1994, 1996, 1998, and 2000, this question was asked about each job.
- 2. Satisfaction with Government Jobs Program: Respondents who were working at a job in conjunction with their participation in a federally funded employment and training program were asked, during the 1979–87 survey years, how satisfied/dissatisfied they were with their entire experience in the jobs program.
- 3. Facet-Specific Job Satisfaction Scale: During the 1979–82 and 1988 surveys, wage and salaried workers, as well as those self-employed in incorporated businesses, were presented with a series of descriptive statements about the pay, working conditions, promotion opportunities, supervisors, coworkers, etc., at their current job and were asked to rate each statement on a scale from "very true" to "not at all true."

Constructing a Job Satisfaction Index: A job satisfaction index can be constructed for the 1979–82 and 1988 survey years by coupling six of the facet-specific job satisfaction ratings listed above with the global job satisfaction measure and a question that asked respondents whether, given the freedom to make such a choice, they would take another job or keep the job they had at the survey point. This scale, a shortened form of the job satisfaction scales of the University of Michigan's *Quality of Employment Surveys*, developed by Quinn (1973), provides a reliable indicator of job satisfaction.

To construct the full seven-item scale, raw scores for each item listed in Table 4.24.1 should be converted to \underline{z} scores for each respondent. The scores can be multiplied by 100 to remove decimals and combined to obtain an unweighted average of the seven \underline{z} scores. The resulting scores for the satisfaction index are either positive or negative numbers that can be interpreted as deviations from the mean for the total sample of survey respondents.

User Notes: Cross-cohort analyses are possible using comparable items from the Original Cohorts.

Table 4.24.1 Variables Needed to Construct the Job Satisfaction Index: NLSY79

		Reference Number for Scale Item								
Survey Year	Challenge	Comfort	Financial Rewards	Relations w/ Coworkers	Resource Adequacy	Opportunity	Global Job Satisfaction			
1979	R00489.	R00490.	R00494.	R00496.	R00497.	R00506.	R00508.			
1980	R02659.	R02660.	R02664.	R02666.	R02667.	R02676.	R02678.			
1981	R04473.	R04474.	R04478.	R04480.	R04481.	R04490.	R04492.			
1982	R07034.	R07035.	R07039.	R07041.	R07042.	R07052.	R07065.			
1988	R25296.	R25297.	R25302.	R25304.	R25305.	Not asked	R25329.			

Survey Instruments: All job satisfaction questions, with the exception of those relating to government jobs, are found in the "Current Labor Force Status" sections of the 1979 (Section 8), 1980 (Section 7), 1981 (Section 6), 1982–92 (Section 5), 1993 (Section 6), and the 1994, 1996, 1998, and 2000 Employer Supplements in the main questionnaires. The 1979 government job satisfaction questions can be found in Section 10 "On Jobs" while comparable questions for the 1980–87 survey years are located in the Employer Supplements.

Data Files: The global job satisfaction variables can be found in the "CPS" area of interest on the main NLSY79 data set. All individual job satisfaction items are located in the year-specific miscellaneous ("Misc. xxxx") areas of interest. The government jobs program variables can be found in the "Government Jobs" area of interest.

References

Quinn, R.B. and Mangione, T.W. "Jobsat '72 and its Kinfolk—a Brief Manual." In *The 1969–1970 Survey of Working Conditions: Chronicles of an Unfinished Enterprise.* Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan, 1973.

Seashore, S. and Taber, T. "Job Satisfaction Indicators and their Correlates." *American Behavioral Scientist* 18 (1975): 333–68.

NLSY79 Children

In each survey, job satisfaction information was collected from the children aged 15 and older, the young adults. Respondents were asked questions similar to the "Global Job Satisfaction" and the "Facet-Specific Job Satisfaction" items described above for the main NLSY79. Beginning in 2000, only "Global Job Satisfaction" was asked.

Survey Instruments: All job satisfaction questions are located in the Employer Supplement sections of the NLSY79 Young Adult Questionnaire.

4.25 Job Search

NLSY79 job search questions provide data that show what methods were used, how intensively respondents searched, and the outcome of these searches. For researchers interested in job search information, the survey provides data on topics not found in many other key labor market data sets like the Current Population Survey (CPS). For example, the NLSY79 provides details on job offers rejected while searching, the desired characteristics of the job being sought, and whether the respondent searched while employed in another job. While every NLSY79 survey contains questions on job search activities, researchers interested in this area should examine the 1982, 1986, and 1987 surveys which contained special sections with a large number of job seeking questions. For users looking to quickly see many of the job search questions, pick the "Job Search" area of interest when using the NLS extraction software.

Who searches: The NLSY79 asks respondents in various surveys who are both working and not working if the they are searching for work. Table 4.25.1 shows the number of respondents who stated they are searching for a job. As the table shows, individuals who are not working are asked in every NLSY79 survey if they are searching. Questions which track searching by employed respondents are only available from 1979 to 1984 and then again in 1996 and 2000.

Table 4.25.1: Number of Employed and Not Employed NLSY79 Job Seekers (Unweighted Data)

Year	# Not Employed Job Seekers	# Employed Job Seekers	Year	# Not Employed Job Seekers	# Employed Job Seekers
1979	2083	1131	1989	325	na
1980	1693	1194	1990	323	na
1981	1343	1371	1991	232	na
1982	1142	1335	1992	252	na
1983	999	1315	1993	282	na
1984	791	1589	1994	428	na
1985	598	na	1996	377	837
1986	485	na	1998	301	na
1987	482	na	2000	269	617
1988	400	na			

Note: na means not available.

To find most of the questions which determine if a respondent is seeking work, search for questions which contain the phrase "looking for work." This phrase captures all of the employed job search questions plus all non employed job searchers from 1979 to 1993. To capture not employed job seekers after 1993, use the phrase "done anything to find work." Most questions about looking for work can be located in the "Job Search" area of interest.

Methods of Job Search: Respondents are asked not only if they searched for work but are also asked the specific types of activities they used to find work. Coded activities usually include: checking with a state employment agency; private employment agency; contacting an employer directly; contacting friends or relatives; placing or answering an ad; and looking in a newspaper. Depending on the specific year and set of survey questions the list of coded activities is sometimes longer than those just mentioned and includes other job search activities like: using a school placement service; taking a civil service exam; contacting an organization such as CETA or the Urban league; checking with a labor union; or asking a teacher for job leads.

In the 1986 and 1987 surveys, not employed job seekers were not only asked which methods they used but were also asked to tell interviewers the top three methods they used. Respondents also ranked these job search methods, allowing researchers to know which method was tried the most.

In 1981, the NLSY79 questionnaire contained an extensive set of time use questions. The time use questions not only covered daily activities but asked roughly 3,300 respondents how long they spent using specific methods of finding work. The job seeking time use section, which begins at R05173., tracks the number of minutes over the last seven days the respondent used employment services, asked relatives about finding work, answered ads, and a variety of other specific techniques. Combining the results from all these questions results in the total number of minutes spent searching for work in the past week.

Duration of Job Search: Questions for both employed and not employed job seekers in the CPS portions of the questionnaire refer to job search activity over the past four weeks. Even though the questions are only asked to respondents who recently searched, the total amount of time spent searching could be much longer than four weeks. If a respondent states that they were seeking work, the NLSY79 questionnaire probes for how long the respondent has been looking for work. While the specific format changes depending on the survey year, researchers can convert all answers into the number of weeks spent searching. While the mean length is under 2 months for those employed and around 3 months for those respondents not employed, users are cautioned that a small but significant number of respondents have very long job searches, with durations around two years.

Why Was the Search Started and Stopped: The NLSY79 has extensive information on both why the respondent started searching and why they stopped. While the exact list of answers varies depending on the survey year, in the questionnaires prior to 1994 there is a single question that asks not employed job seekers why they are searching for work. Job seekers can state they began a search because they lost their job, quit their previous job, left school, want to help the family with money, or a host of other reasons. The reasons are also asked in selected surveys to employed job seekers.

Beginning in 1994, there is no longer a single question which asks not employed seekers why they are looking. Instead the single question is replaced by a sequence (see for example the 1994 sequence R45541.00 – R45543.00) which first asks the respondent's activities before starting their job search, followed by questions which ask respondents how their last job ended. While this sequence of questions does not completely replicate the single question set of answers, combing the information from the sequence provides a relatively close match.

Given the NLSY79 is a longitudinal survey that tracks, month-by-month, the respondent's labor market status (see the work history section for details on this month-by-month tracking) it is relatively easy to see when a job seeker found a new position. However, not all job seekers find employment. The NLSY79 also contains some information on why people are no longer searching for work. For example, in the 1996 CPS section, selected respondents were asked why they were no longer looking for work. Responses included: chance for advancement improved in their current job, could not find a better job, pay increased at their current job, working condition improved at their current job, relocation plans changed, career plans changed, the respondent's financial situation improved, and a layoff ended.

Special Sections: The NLSY79 has periodically added a number of special job search sections to the questionnaire. In the 1982 survey a section entitled "job finding" was added. This section asked very detailed questions about how the respondents found their current primary job. The section contains the standard high level questions such as what was the main reason you were looking for work and what methods did you use to find work?

Beyond these standard questions, the section contains unique job search questions. Respondents are asked to specify exactly how many employers they directly applied to for work; how far they traveled to look for work; and if the respondent moved to take the new job. Additionally, respondents were asked if any specific person helped them to get a job. If a specific person did help them, that person's sex, relationship to the respondent, and degree of help are all quantified by the survey.

While most of the job search questions are found under the "Job Search" area of interest, other questions, particularly those that track job search by unemployed respondents are found in the Current Population Survey areas. These areas are labeled "CPS," "CPS 1994," "CPS 1996," and "CPS 1998."

In the 1986 and 1987 surveys the "gaps between jobs" section was expanded for the male portion of the cohort. For each gap between jobs, respondents were asked about all types of methods used to find work. Then, month-by-month within that gap, respondents were asked the specific search methods used during that shorter time period. Respondents who stated more than three methods were asked to list the three most frequently used.

Finally, for each of the top three methods the respondent was asked how many job offers each method produced, the highest wage for each method, and if the offer was accepted. If the person rejected the job offer they were asked why. A partial list of reasons for rejection includes unsuitable working conditions, too many hours, better offer provided, and transportation difficulties.

Beginning with the 1994 survey, the CAPI survey's employer supplement sections now contain a number of specific questions about how the respondent found the particular job on which the supplement focuses. Respondents are first asked if they were looking for work when they were offered the job. Then respondents who were looking for work were asked which job search method led to their being offered the job. Finally, respondents were asked if they turned down any other offers before accepting this job and how much those other offers paid.

Hypothetical Jobs: NLSY79 surveys from 1979 to 1982 included questions about hypothetical job offers. These questions can be found by looking for the word "hypothetical" in the any-word-in-context search. The set of questions in 1979 asked the respondent would they work at \$2.50 per hour, \$3.50 per hour and \$5.00 per hour washing dishes, doing factory work, cleaning, work checking out groceries in a supermarket, cleaning up the neighborhood, making hamburgers, and working in a national park.

Additional questions from 1979 to 1982 asked how much money it would take for a person to switch employers if the job was in the same general field. If the person was interested in switching the survey asked how many days per week the respondent wanted to work and how many hours per day they would like to be employed at the hypothetical job.

These questions provide information about the respondent's reservation wage, or the minimum pay needed to cause the individual to either switch jobs or join the labor force. Combining this with general labor market indicators found on the NLSY79 CD-ROM such as the local area unemployment rate, enables researchers to understand how the local labor market conditions affect an individual's work force decisions.

User Notes: Users should know that not all unemployed individuals are job seekers. While the vast majority of the unemployed are looking for work, this classification also includes respondents who are laid off and waiting for recall as well as those about to start a new job within 30 days.

4.26 Jobs & Employers

This section discusses the types of employer and job characteristic information available on the NLSY79 main data files. Job information present on a separate data set called the NLSY79 Work History File is discussed in the "Work History Data" section of this guide. A series of closely related variables providing information on (1) time spent with an employer, i.e., start and stop dates for each job, hours, tenure, type of shift worked; (2) time spent away from an employer either on unpaid or paid leave, i.e., gaps within jobs; and (3) periods not working or in the military, i.e., gaps between jobs, are discussed in the "Time & Tenure with Employers" section of this guide.

NLSY79

The NLSY79 collects detailed information about individual employers for whom a respondent has worked. These data are gathered within several sections of the main questionnaire and in some years in separately administered, job-specific instruments called *Employer Supplements*.

This section reviews the NLSY79 respondent-provided employer information and the survey instruments that collect these data. It then discusses in more detail (1) the types of employers about whom information is collected during each survey round; (2) the variable series which provides a cumulative count of employers for whom a respondent has worked; and (3) how information collected on a specific employer can be linked both within and across survey years. Concluding this section is an overview of the various types of job characteristic data that describe a respondent's employer and the position the respondent holds with that employer.

Readers should note that all references to a "job" are essentially references to a given employer; thus, the terms "job" and "employer" are used interchangeably within most NLSY79 employer-related discussions. This section assumes that the reader possess some general understanding of (1) the *Current Population Survey (CPS)* and its relevance to the NLSY79 questionnaire section by that name and (2) the functions of several NLSY79 survey instruments used in the collection of employer information, namely the questionnaire, the *Employer Supplement (ES)*, and the *Information Sheet*. Background information on these subject areas can be found in the "Labor Force Status" and "Survey Instruments" sections of this guide.

Employer Data Collection: Detailed information is collected during each interview on new and previously reported employers for whom a respondent has worked since the date of the last interview. Two sets of employers are identified based upon when the respondent first reports working for that employer: (1) new employers for whom the respondent reported working since the date of the last interview and (2) previously reported employers with whom employment has been maintained (for any

length of time) or renewed since the date of the last interview. Previous employers (category 2) are further distinguished by whether the respondent was working for them at or before the date of the last interview.

Until 1994, the current or most recent employer, called the "CPS employer," is differentiated in the data set from other employers for whom the respondent reported working since the last interview by title (i.e. start date for CPS job, start date for Job #2, start date for Job #3, etc.). Beginning in 1994 CPS job information is simply labeled as "job #1" because the jobs are all collected in the *Employer Supplement*. Every employer for whom a respondent worked since the last interview, including the CPS employer, is identified within the data set by a yearly job number, e.g., Job #1, Job #5, with the number reflecting the order in which the job was reported. The detailed job characteristic information at the end of this section is collected for each CPS job, regardless of whether it is a full- or part-time job.

Because the NLSY79 employer data collection relies on the successive administration of several survey instruments that not only gather information on multiple employers but also connect that information to data provided during earlier interviews, a brief overview of the mechanics of each interview's job collection effort follows.

Administration of the Survey Instruments Collecting Job Information: Two different sections of the NLSY79 questionnaire and until 1993 separate employer-specific survey instruments called the *Employer Supplements (ES)* collect employer-related information. Using these two instruments, interviewers gather details about all employers for whom a respondent has worked since the date of last interview. An interviewing aid called the *Information Sheet* is also provided to each interviewer; this document lists the names of employers reported during previous surveys and is used by the interviewer during the current interview to update each respondent's work record with a previous employer, if work with an employer took place since the date of last interview. A quick overview of the instruments used to collect NLSY79 jobs data and the function each performs is provided in Table 4.26.1.

Table 4.26.1 Functions of the Various Job-Related Survey Instruments

Sections of the Main Questionnaire							
"CPS"	"On Jobs"						
Until 1993, functioned to identify the respondent's current or most recent job and to collect detailed information about the CPS job. Beginning in 1994, no job specific information was collected in the CPS section. Instead, it is all collected in the <i>Employer Supplements</i> .	Identifies and lists, in reverse chronological order, all employers for whom the respondent has worked SINCE the date of last interview (excluding the CPS job). Checks to see that the respondent has not missed any employers for whom he or she was working AT the date of last interview. Since 1994, this section mechanically determines the CPS job.						

Employer-Specific Instruments

Employer Supplements (ES)

Collect, in separate employer-specific supplements, detailed information on each employer for whom the respondent worked SINCE the date of last interview. The first instrument is generally completed about the CPS job and supplements information on that job collected in the "CPS" section of the main questionnaire. Additional supplements are completed for each job listed in the "On Jobs" section. Since 1993, Job #1 is always the CPS job if there is a CPS job.

Interviewing Aid

Information Sheet

Provides each interviewer with a respondent-specific list of employers for whom a respondent has reported working between the previous two interviews. Questions in both the "On Jobs" section of the main questionnaire and in each *Employer Supplement* route the interviewer to the names of employers for whom the respondent reported working at an earlier interview. Two sets of employers are listed: (1) names of each employer reported AT the date of last interview and (2) names of each employer for whom a respondent worked between the last and the PREVIOUS to the last interviews. An *Employer Supplement* is completed for each employer listed on the *Information Sheet* if the respondent has worked for that employer since the date of last interview.

The sequence in which employer-related questionnaire sections are administered has implications for the universe of respondents for whom job-related information is available. During all surveys to date, the "Military" section of the questionnaire has been administered prior to the two employer-related sections, the "CPS" and "On Jobs," and the *Employer Supplements*. After completing the "Military" section of the questionnaire, those respondents serving in the active forces were skipped past most or all of the "CPS" section to the "On Jobs" section in order to determine if they had been engaged in any non-military work since the last interview. Those not currently in the active forces have been routed directly to the "CPS" section, where detailed information on their current or most recent job and other labor market activities is collected. The universe for the CPS variables, thus, is civilian respondents—those not serving in the active forces—who were working for pay either during the survey week or since the date of last interview. The universe for "On Jobs" includes all respondents, both civilian and military. Users should note that although the sequencing of the "Military," "CPS," and "On Jobs" sections was modified beginning with the 1993 CAPI-administered interviews, no universe changes occurred.

During each interview, a separate *Employer Supplement* is completed about each employer for whom the respondent worked. Questions in each *ES* link information about these earlier jobs with the employer information collected in the "CPS" section of the main questionnaire, if appropriate, and with the employer (job) number of this employer, if any, assigned at the previous interview. Users should note that, after the implementation of CAPI, the *Employer Supplement* physically became a part of the questionnaire.

NLSY79 Employer Types: This section discusses the various types of employers about which information is collected during each survey. Incorporated within the discussion is specific information on (1) how the CPS employer is designated; (2) how information on the CPS job—collected during many survey years within two separate survey instruments—can be linked; and (3) how a specific employer for whom a respondent has worked since the last interview can be matched to the same employer reported during a previous interview.

Current or Most Recent (CPS) Employer: The NLSY79 replicates questions from the Current Population Survey, which specify the employer(s) with whom a respondent is associated at the time of the survey. A "CPS employer," or current/most recent employer, is designated for each civilian NLSY79 respondent who reported working for pay at some point since the last interview.

The methods employed to identify an employer as the CPS employer vary by interview mode. During the 1979–92 paper and pencil interviews, the CPS job was identified by NORC interviewers from the respondent's answer to the following open-ended question:

"For whom did you work last (week)? IF MORE THAN ONE EMPLOYER, PROBE: for whom did you work the most hours during the last week (you worked)?"

The actual name of the respondent's employer [e.g., the Aspen Ski Company, Oliver's Saloon] is manually recorded in the questionnaire and entered on the cover page of an *Employer Supplement*. Because not all respondents were at work during the survey week and some were at work for more than one employer, detailed instructions on how to identify the CPS employer are provided to NORC interviewers within the round-specific *Question by Question Specifications* manuals. A summary of instructions from the 1996 interviewers' manual appears in Table 4.26.2.

Table 4.26.2 Instructions to Interviewers for Identifying the CPS Employer for Civilian NLSY79 Respondents: 1996

For *those not at work* during the survey week but who worked for pay since the last interview: the CPS employer is the most recent employer

For those who worked during the survey week

for one employer: the CPS employer is the current employer

for two or more employers: the CPS employer is the employer for whom the respondent worked the most hours

for two or more employers with the same number of hours each employer: the CPS employer is the employer for whom the respondent worked the longest

For *those absent* from their regular job during the survey week but who were working temporarily for another employer: the CPS employer is the current employer not the employer of absence

Source: CHRR. Question by Question Specifications - Main Questionnaire - NLS Round 17 (Q6 - Q33).

Information on the CPS job has been collected during the 1980–93 survey years within the "CPS" section of the main questionnaire and within a single ES for 1980–2000. Comparable information was gathered during 1979 in the "CPS" and "On Jobs" sections of the main questionnaire. A variable named, 'Is There a CPS Employer?' R41819. in 1993 for example, specifies whether or not there is a CPS employer for each respondent. The various types of job characteristic information collected about each CPS job/employer are discussed below.

Beginning with the 1993 CAPI-administered interviews, the CPS job is identified by internal CAPI procedures which factor in, for civilian respondents, stop date information specific to each recorded job. Additional information on CAPI CPS-designation procedures, e.g., how the CAPI program handles multiple employers with the same stop date, can be found in the documentation item entitled "Introduction to the 1993 through 1998 CAPI Questionnaires and Codebooks" in the 1979–98 *Codebook Supplement*.

Employers since the Last Interview—Jobs #1-#5: The "On Jobs" section of the questionnaire and the job-specific Employer Supplements, both administered during most survey years immediately after the "CPS" section, gather information about each employer for whom a respondent worked since the date of last interview. A separate Employer Supplement (ES) is completed for each since-last-interview employer. Although information is collected about all employers for whom a respondent worked since the last interview, data on only the first five jobs or employers are released on the NLSY79 main data set. In each survey, the number of respondents who report more than five jobs is less than one percent of those interviewed.

During pre-1993 PAPI surveys, interviewers were instructed to collect information on the jobs a respondent held in reverse chronological order, with the current or most recent job first, followed by the

next most recent, etc. This means that for most—although not all—respondents, Job #1 will be the CPS job, Job #2 could be the job held concurrently with the CPS job or immediately preceding it, and so forth. The job number to which the content of the variable refers, e.g., Job #1, Job #2, etc., is appended to each variable title. The mechanics used to designate the CPS job in post-1992 CAPI interviews results in all CPS jobs being Job #1. Before 1994, the collection of information on the CPS job within the "CPS" section of the main questionnaire and within a separate *ES* means that researchers may find it necessary to link information collected within the two instruments or sections. The variable series that enables these data to be linked is described briefly below. Users should note that while the CD-ROM contains only information on the first five jobs, all created variables, such as time worked during the year, are based on information on all jobs reported by the respondent.

<u>Linking Job #1 - Job #5 to the CPS Job:</u> During administration of each *Employer Supplement*, an interviewer check item determines whether the employer about whom information is being collected, e.g., Job #1, is the CPS employer recorded in the "CPS" section of the main questionnaire. Interviewer responses to this item are found in the variable series 'Int Check - Is Job #X Same as Current Job?' Available for each survey year, these variables can be used to link information about the CPS job collected in an *ES* to that collected about the CPS job in the main questionnaire for survey years 1979–92.

Employers at or Prior to Date of Last Interview: In order to construct a continuous work record with each employer, information collected during the current interview is connected to data gathered about the same employer during earlier interviews. Information is updated on two sets of employers: (1) those employers for whom a respondent was actually working at the time of the last interview; and (2) those employers for whom a respondent had previously worked but for whom s/he was not working at the last interview date. Note: Information on these previous-to-last-interview employers is collected only if the respondent reports working again for that employer.

A separate interviewing aid called the *Information Sheet* provides NORC interviewers with a listing of the names and respective job numbers of each of these previous employers. Each set of employers is listed under a different *Information Sheet* item, e.g., Item 05, Item 06, etc. Users should note that these *Information Sheet* item numbers are not consistently numbered across years, e.g., the "at date of last interview" employers appear as Item 12 in 1980 but as Item 05 in 1991, while the "previous to date of last interview" employers appear as Item 13 in 1980 but as Item 06 in 1991. These *Information Sheet* item numbers are referenced within the *ES* question verbatims and will be found in the title of each such variable, as illustrated below. Questions at the beginning of each *ES* route the interviewer to the name and job number of each such employer listed on the *Information Sheet* in order to connect information collected during the current survey with information on that same employer gathered during an earlier

interview. Matching of employers across survey years is made possible with the linking variables described below:

<u>Linking Job #1 - Job #5 to a Previous Employer</u>: Employers for whom the respondent worked at an earlier survey about which information is collected during the current interview can be matched via a set of variables entitled 'Employer Number from Info Sheet, Item XX That Matches, Job #X.' These variables are taken directly from interviewer transcriptions (or since 1993, from the CAPI item) in each *ES*, which link the job number of an employer identified during a previous interview to that of the (same) employer about whom information is being collected in the current survey year's *ES*. The variable titles of this series include a reference to the *Information Sheet* item reflective of the series to which it belongs; in the examples below, the item 05 variables in the 1991 survey reference those employers for whom the respondent worked at the last interview (i.e., 1990 or earlier), while the 06 titles indicate employers reported **previous** to the last interview.

'Employer Number from Info Sheet, Item 05 That Matches, Job #1' - identifies the employer number (1 through 5) of the job at which the respondent worked at the last interview which is a match to Job #1, in the current interview.

'Employer Number from Info Sheet, Item 06 That Matches Job #5' - identifies the employer number (1 through 5) of the job at which the respondent worked **previous** to the last interview which is a match to Job #5, about which information is collected during the current interview.

Employer number for each item are not numbered independently. In other words, if Employer #2 appears under item #5, it cannot also appear under item #6. Since 1993, only one variable per job has been needed with the previous employer number. Users should note that question numbers assigned to these variables reflect the actual questions found in each Employer Supplement. These linkage variables should not be confused with a second set which contain, within their variable titles, similar references to Information Sheet items. These variables, entitled 'Info Sheet Item 05 - 1st Employer at Time of Last Interview,' or 'Info Sheet Item 06 - 1st Previous Employer,' do not provide comparable match information. Instead, they provide the job number of the first, second, third, etc., employer for whom a respondent worked at the time of an earlier interview, e.g., the job number of the first employer at the time of the last interview was "01." These variables should be used only to count the total number of jobs a respondent reported at an earlier date, not as a means of linking such past employment to a job about which information is being reported at the current interview. These non-match variables are identified by their reference number on a facsimile Information Sheet distributed with the NLSY79 main file documentation set. This variable series can be distinguished from the match set described above by different variable titles and by the assignment of fictitious question numbers as the source of the variable. The procedure for matching employers is detailed in depth in Appendix 9 of the NLSY79 Codebook Supplement.

Jobs Ever Reported as of Interview Date: The variable series 'Number of Jobs Ever Reported,' created for each survey year, provides a cumulative measure of the number of different employers that a respondent has reported up to the point of interview. Any employer identified as different from employers at the date of last interview and in the period before the date of last interview is counted as a different or new employer. This set of variables is created by simply counting each such employer in a current survey year and adding that sum to the total from the previous interview year in order to provide a cumulative figure through all survey years.

Users should be aware that a small degree of double-counting of employers may exist in these variables. It is only possible to track a given employer between contiguous interview years in which information was collected on the specific employer. It is therefore conceivable that a respondent who works for a particular employer during one year, leaves that employer for the next year or more and then subsequently returns to that same employer would appear to be working for a new employer during the second tenure because the previous tenure with that employer would have slipped out of scope for tracking purposes.

User Notes: Most of the variables described above can also be found on the NLSY79 Work History CD-ROM. When making extensive use of these variables, researchers may find the Work History CD-ROM easier to use than the main file.

Program Derivation: The PL/1 program statements which create the 'Number of Jobs Ever Reported' variables are contained in the Work History program (see the "Work Experience" section of this guide) and read as follows:

Table 4.26.3 Computer Code to Create Number of Jobs Ever Reported

```
/*** COMPUTE CURRENT JOBEVER() ***/
JOBEVER(NEWYEAR)=0: /* FIND GREATEST JOB CNT IN HHOLD HIST */
DO I=(NEWYEAR-1) TO 1 BY -1 WHILE (JOBEVER(NEWYEAR)=0);
    IF OLDHIST(I).OJOBEVER=-3 THEN JOBEVER(NEWYEAR)=-3;
    ELSE IF OLDHIST(I).OJOBEVER>0 THEN JOBEVER(NEWYEAR)=
       OLDHIST(I).OJOBEVER;
IF JOBEVER(NEWYEAR)>=0 THEN DO; /* ADD ANY ADDITIONAL JOBS? */
DO I=1 TO 10;
    IF NUMBER(NEWYEAR,I)>100 & (PREVIOUSEMP#(NEWYEAR,I)=-3 |
       PREVIOUSEMP#(NEWYEAR.I)=0) THEN JOBEVER(NEWYEAR=-3;
    ELSE IF NUMBER(NEWYEAR,I)>100 & PREVIOUSEMP#(NEWYEAR,I)=-4 &
       JOBEVER(NEWYEAR)>=0) THEN
       JOBEVER(NEWYEAR)=JOBEVER(NEWYEAR)+1;
    END;
END;
END:
```

Types of Job/Employer Characteristic Information: Descriptive information is collected about each job or employer and about the position a respondent occupies with that employer. The level of detail available for a given job varies by (1) whether or not that job was designated as the current or most recent job and (2) the number of hours per week and/or number of weeks that were worked. Complete job characteristic information is available for those jobs specified as the CPS job, as well as for those jobs at which a respondent reported working more than ten hours a week for more than nine weeks since the date of last interview. This section briefly summarizes the differences in the kinds of data collected for the CPS versus non-CPS jobs. It then reviews the various types of job characteristic information which are available and refers users to other sections of the guide which discuss each characteristic more fully.

User Notes: Users should be careful to distinguish these sets of job characteristic variables from the separate and distinct 1979 and 1982 data collections, which provide information on such qualitative aspects of a respondent's current job such as degree of autonomy, variety, opportunity to deal with people, and job significance. This series can be distinguished from the variables discussed below by the phrase JOB CHARACTERISTICS ITEMS, which has been appended to each of the 22 1979 and 1982 variable titles. (See the "Job Characteristics" section of this guide.)

<u>CPS Job</u>: All of the job characteristic information described below—including that on firm size and job satisfaction—is available for the job designated as the "CPS job." These data are available for any CPS job regardless of whether the job is a full-time, part-time, or temporary job. During paper-and-pencil interviews, all job characteristic information about the CPS job except that pertaining to usual earnings was collected within the "CPS" section of the main questionnaire. Beginning with the 1994 CAPI interviews, all CPS job-related information is gathered in the *Employer Supplement*. Wage information across survey years continues to be collected within the job-specific *Employer Supplements*.

Non-CPS Jobs: Some detailed characteristic information is only available for non-CPS jobs meeting certain time and tenure requirements. Detailed questions are asked about jobs at which the respondent has worked for at least nine weeks since the last interview and at which the respondent generally worked at least 20 (through 1986) or 10 (since 1987) hours per week.

Brief summaries of select sets of job characteristic data appear below. References are provided to other sections of this guide that discuss these variables in more detail. Several other sets of job characteristic variables, e.g., union membership, coverage by a collective bargaining agreement, and whether a respondent's association with a given employer was the result of a federally sponsored employment and training program, are also covered in other sections of this guide such as "Training."

<u>Class of Worker</u>: For each CPS job (whether full- or part-time) and to each non-CPS job for which a respondent worked for more than ten/twenty hours a week and more than nine weeks since the last interview, a code is assigned indicating whether the respondent (1) works for a private company or for an individual for wages, salary, or commission; (2) is a government employee; (3) is self-employed in his/her own business, professional practice, or farm; or (4) is working without pay in a family business or farm. Both the CPS and non-CPS series further identify government workers as Federal, State, or Local-level employees and distinguish the businesses of self-employed respondents as incorporated or unincorporated. See the "Class of Worker" section of this guide and refer to the "User Notes" in that section detailing the changes in coding for "Class of Worker" variables.

<u>Firm Size</u>: The number of employees both at the place where the respondent is currently employed and at other locations is available for the CPS job. These data were collected during all survey years except 1981–85. Beginning in 1994, these variables are available for all employers.

Fringe Benefits: During the 1979–93 interviews, information on the availability of various types of fringe benefits provided by the CPS employer was collected for those respondents working 20 hours or more a week. Beginning with the 1993 survey, those respondents working 20 hours a week or less were also asked if their employer made any benefits available, and if so, which ones. Beginning in 1994, fringe benefit information was collected for both the CPS and non-CPS jobs. [See the "Fringe Benefits" section of this guide.]

<u>Hours</u>: Information on the number of hours worked at the CPS job, at each non-CPS job, and at all jobs combined is available for each survey year. A set of created summary variables provides a count of the total number of hours worked since the date of the last interview and during the past calendar year. Details on the type of shift and the actual clock hours worked have been collected during select survey years for the CPS job. Beginning in 1994, these data were collected for all employers (CPS and non-CPS). [See the "Time & Tenure with Employers" and "Labor Force Status" sections of this guide.]

<u>Industry</u>: A code from the 1970 and 1980 Census industrial classification system is assigned to each CPS job (whether full- or part-time). A 1970 Census industry classification code is assigned to each non-CPS employer for whom a respondent worked for more than ten/twenty hours a week and more than nine weeks since the last interview. [See the "Industries" section of this guide.]

<u>Job Satisfaction</u>: Respondents employed since the last interview are asked to rate, on a four point scale, how they feel about their current or most recent (CPS) job. Beginning in 1994, this information was collected for all CPS and non-CPS jobs. [See the "Job Satisfaction" section of this guide.]

Occupation: A code from the 1970 and 1980 Census occupational classification system is assigned to each CPS job (whether full- or part-time). A 1970 Census occupational code was assigned to each non-CPS employer for whom a respondent worked for more than ten/twenty hours a week and more than nine weeks since the last interview. [See the "Occupations" section of this guide.]

<u>Wages</u>: Rate of pay information, including the time unit of pay, is collected for each CPS and non-CPS job (whether full- or part-time). A series of hourly rate of pay variables are created for each employer for whom a respondent worked since the date of last interview. [See the "Wages" section of this guide.]

User Notes: Some variation exists across survey rounds in the level of job characteristic detail available. "Job" should not be interpreted as occupation or employment duties but rather as an employer. If a respondent changes work activities for a single employer, this is counted as only one "job."

Survey Instruments: Select information on the CPS employer can only be found in the CPS section between 1979 and 1993.

NLSY79 Children

In each survey, extensive information on jobs and employers has been collected from the children age 15 and older, the young adults. These respondents were asked to provide information on up to five employers. Through 1998, the series of questions closely parallel those asked in the main NLSY79. Beginning in 2000, this series was greatly streamlined with the greatest detail asked only of the current or most recent primary employer.

Survey Instruments: The jobs and employers data can be found within the Employer Supplements section of the NLSY79 Young Adult Questionnaires.

4.27 Labor Force Status

The following section describes the various labor force status variables present in the NLSY79. It does not provide either a comprehensive discussion of all questions asked in the "Current Labor Force Status" sections of the various NLSY79 survey instruments or a thorough treatment of the detailed information available on labor market transitions and work histories. Users should consult the table of contents and index of this guide for references to additional labor market-related topics of interest, e.g., work experience, job characteristics, job satisfaction, industries, occupations, wages, etc. Each questionnaire's "Current Labor Force Status" section collects information on the labor market activity in which respondents were engaged during most of the full calendar week (Sunday-Saturday) preceding the date of interview. There is no CPS section in 2000.

This series replicates the questions asked in the monthly *Current Population Survey (CPS)* of American households conducted by the U.S. Census Bureau for the U.S. Department of Labor. The primary purpose of the CPS is to collect up-to-date information about the number of persons in the country who are employed, unemployed, or not looking for work during a given survey week. Results from the CPS surveys, released in the Bureau of Labor Statistics' monthly publication *Employment and Earnings*, provide detailed information classified by age, sex, race, and a variety of other characteristics, on the employment and unemployment experiences of the U.S. population.

NLSY79

A series of variables provides information on respondents' labor force status during the survey week and during each week since 1978. These point-in-time indicators are complemented by a set of summary measures, which provide a count of the total number of weeks a respondent occupied a given labor force status (e.g., working, unemployed, out of the labor force, in the active Armed Forces). In addition to the respondent-specific variables discussed below, data are also available on the work experience of respondents' parents, spouses, and other household members.

Survey Week Labor Force Status: The following three sets of variables on each respondent's labor force status during the week preceding the survey week are available for each survey year as indicated for the universes specified below:

1. Activity Most of Survey Week (1979–93): The 'Activity Most of Survey Week' variables reflect each civilian respondent's reply to the survey question "What were you doing most of last week?" "Last week" refers to the full calendar week (Sunday through Saturday) preceding the date of interview. The following seven categories of responses have been coded from each year's survey: (a) working, (b) with a job-not at work, (c) looking for work, (d) keeping house, (e) going to school, (f) unable to

work, and (g) other. Definitions for each of these activities are intended to be consistent with those used in the CPS. Tables 4.27.1 and 4.27.2 provide definitions of key CPS labor force concepts as well as the set of instructions provided during one survey year to NORC interviewers for coding respondents' labor market status. The main survey week activity question was followed by a second question, which sought to identify those respondents who did do some work in addition to a main survey week non-working activity (such as "looking for work" or "going to school"); this follow-up question was asked of all respondents except those who indicated that they were working or were unable to work. It is to these two groups, those whose primary activity during the survey week was working and those who responded that they indeed did some work even though it was not their primary labor force activity, that the series of questions on hours worked was administered.

- 2. Work for Pay or Profit Last Week (1994–2000): Beginning in 1994, the CPS section underwent significant changes as outlined later in this chapter. The 'Activity Most of Survey Week' question was replaced with "Last week, did you do any work for pay or profit?" Respondents can answer yes, no, retired, disabled, or unable to work. For those answering no, follow-up questions determine whether the respondent has a job from which he or she is temporarily absent, e.g., on vacation, sick leave, labor dispute, military duty, etc. Follow-up questions also probe for more information about disabilities or other reasons a respondent is unable to work. Note that the previously used follow-up question seeking to identify those who did some work in addition to a main survey week non-working activity no longer exists.
- 3. Employment Status Recode (1979–98): Created variables called 'Employment Status Recode' (ESR) are available for each survey year through 1998. These variables recode the survey week activity of civilian NLSY79 respondents into labor force status measures consistent with those developed for the CPS. This recalculation not only factors in the respondent's reported survey week activity but also takes into account variables such as hours worked, whether working for pay, whether looking for work, what the respondent is doing to find work, whether and why s/he was absent from a job, etc. Added to the seven labor market status categories listed in (1) above is an eighth category, "in the active forces." Tables 4.27.5 and 4.27.6 at the end of this section present frequencies for the ESR variables by survey year, race, and gender. The algorithm changed in 1994 in an attempt to match the new CPS algorithm as closely as possible.
- 4. Employment Status Recode-Collapsed: A collapsed version of ESR is available that classifies all NLSY79 respondents into one of the following four labor market activity categories: (1) employed ("working" or "with a job not at work"); (2) unemployed; (3) out of the labor force ("keeping house," "going to school," "unable to work," or "other"); and (4) in the active forces.

Survey Instruments: The questions "What were you doing most of last week?" and "Last week, did you do any work for pay or profit?" are located in the "Current Labor Force Status" or "CPS" section of each year's questionnaire: Section 8 (1979); Section 7 (1980); Section 6 (1981, 1993); and Section 5 (1982–92, 1994–98). Age restrictions relevant to the 1979 administration are discussed in the User Notes of the "Age" topical section of this guide.

Documentation: Each year's interviewers' reference manual, or *Question by Question Specifications (Q by Q)*, provides detailed instructions for interviewers on how to code the "Current Labor Force Status" sections of NLSY79 questionnaires. A special CPS specifications section of the *Q by Q* provides detailed definitions for each activity. Creation procedures for the 'Employment Status Recode' variables can be found within "Appendix 1 - ESR Variable Creation" in the *NLSY79 Codebook Supplement*.

Data Files: The 'Activity Most of Survey Week' and 'Work for Pay or Profit Last Week' variables are located on the main NLSY79 data set within the "CPS" area of interest; both versions of ESR are located in the "Key Variables" file.

Table 4.27.1 Definitions of Key CPS Labor Force Concepts

In the Labor Force: All persons in the civilian labor force (described below) and members of the Armed Forces stationed in the United States.

In the Civilian Labor Force: All civilians classified as either employed or unemployed during the survey week.

Employed: (1) All civilians who, during the survey week, did any work at all as paid employees in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family; and (2) all those who were not working but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, labor-management disputes, or various personal reasons, whether they were paid for the time off or were seeking other jobs. Excluded are persons whose only activity consisted of work around the house (such as own home housework or painting or repairing own home) or volunteer work for religious, charitable, and similar organizations.

Unemployed: All civilians who had no employment during the survey week, were available for work, except for temporary illness, and (1) had made specific efforts to find employment some time during the prior four weeks, (2) were waiting to be recalled to a job from which they were laid off, or (3) were waiting to report to a new wage and salary job scheduled to start within 30 days.

Out of the Labor Force: All persons who are not classified as employed or unemployed or in the Armed Forces. Includes persons engaged in own home housework, in school, unable to work because of long-term physical or mental illness, retired, and other. The "other" group includes individuals reported as too old or temporarily unable to work, the voluntarily idle, seasonal workers for whom the survey week fell in an off season and who were not reported as looking for work, and persons who did not look for work because they believed that no jobs were available in the area or that no jobs were available for which they could qualify. Persons doing only incidental, unpaid family work (less than 15 hours in the specified week) are also classified as not in the labor force.

Source: Concepts and Methods Used in Labor Force Statistics Derived from the Current Population Surveys. BLS Report No. 463, Series P-23, No. 62, Current Population Reports. Washington, DC: U.S. Government Printing Office, October 1976.

User Notes: It should be noted that (1) NLSY79 fielding procedures include data collection from institutionalized individuals and (2) NLSY79 respondents on active military duty are not asked CPS questions. Additionally, although all respondents are asked the CPS questions concerning activity most of survey week and the CPS job, those age 15 and under in the early survey years were not asked the questions about looking for work.

Although the "Current Labor Force Status," or CPS, sections of the NLSY79 questionnaires follow the wording and format of questions in the Current Population Survey, users should be aware that NLS "CPS" sections include questions over and above those asked in the Current Population Survey. Additionally, while instructions provided to interviewers of NLSY79 respondents are designed to be completely consistent with those of the CPS, NORC interviewers may be less familiar with CPS methodology and procedures than CPS-trained Census interviewers.

CPS Changes in 1994: Beginning in 1994, the "Current Labor Force Status" (CPS) section was changed to ensure that the NLSY79 matched changes that occurred in the Current Population Survey. This survey underwent a major revision in January 1994, thus causing a revision of the corresponding NLSY79 section.

The Census Bureau and Bureau of Labor Statistics revised the national CPS for four major reasons:

- (1) Because the last major CPS revision occurred in 1967, research suggested that the wording of many CPS questions was dated and response lists no longer reflected typical answers. For example, the old set of CPS responses did not have child care problems on the list of reasons why a respondent was absent from work in the last week.
- (2) In 1979, the National Commission on Employment and Unemployment Statistics, or Levitan Commission, had suggested a number of changes to U.S. labor force classifications. The new CPS implements many of the recommendations, such as tightening the definition of discouraged workers.
- (3) Research in survey methodology suggested better ways of asking questions. For example, inserted before occupation and industry questions is a new question that checks if the respondent has changed jobs or employers since the last survey. This extra question dramatically reduces the number of spurious job changes recorded.
- (4) Advances in computer technology made it desirable to switch from a paper-and-pencil instrument (PAPI) to a computer-administered instrument (CAPI). Switching to CAPI eliminates a variety of data transcription problems, automates the survey's skip patterns, and allows answer checks during the interview instead of during a post-processing phase.

NLSY79 users will see a number of changes when they compare the 1994 NLSY79 CPS section with earlier years. First, there are many more data items. The 1993 CD-ROM contains data for 87 CPS items, while the 1994 version contains 228 data items. Not all of these new questions contain useful data since a number are internal machine checks.

Moreover, even though there are more data items, some respondents actually answer fewer questions in the new survey. For example, the 1994 NLSY79 contains information on 50 disabled individuals. These individuals answer only a small number of the section's questions. However, for many respondents the CPS section now contains more in-depth answers. Additional categories of answers are added to many questions, such as how respondents search for work and the number of multiple jobs a respondent holds.

Finally, NLSY79 researchers should know that the new CPS section increases the likelihood that a respondent is classified as unemployed. For example, data from the BLS parallel survey suggest that the new survey's introduction increased national unemployment rates by 0.5 percent. Moreover, this increase primarily occurs among women, not men.

Weekly Labor Force/Military Status: The detailed information on employment dates and gaps between jobs collected during the regular youth surveys has permitted the construction of weekly labor force status variables for each NLSY79 respondent for the period January 1, 1978, through the most current survey date. In the event that a respondent is not interviewed for one or more years, s/he is asked to provide retrospective information at the first reinterview point in order to maintain a continuous set of variables in the Work History data. These variables enable researchers to determine whether, during any week since January 1, 1978, a respondent was (a) working, (b) associated with an employer, (c) unemployed, (d) out of the labor force, (e) not working, or (f) on active military duty (for some survey years). Because these weekly labor force variables are constructed from actual start and stop dates and information on employment gaps within and between jobs, the coding categories and meanings differ from the survey week variables described above. These coding categories are defined in Tables 4.27.2 and 4.27.3. Users should note that the number of weeks in each array is greater than the actual number of weeks filled in to provide a "cushion" when creating the Work History data. The extra weeks found in these arrays contain no valid data; the Work History documentation provides further details.

Data Files and Documentation: The weekly constructed labor force status variables are found only on the Work History Data File. The Work History documentation provides background information on the development of this special file as well as descriptions and codes for each set of variables.

Table 4.27.2 Instructions to NORC Interviewers for Coding NLSY79 Respondents' Labor Force Status

Working: Working for pay at a job or running one's own business or profession (or farm) or working without pay in the family farm or business. Includes (1) jury duty if the respondent is paid for jury duty, (2) respondents working as civilian employees of the Armed Forces or the National Guard; (3) respondents not paid with money but paid "in kind" (meals, living quarters, or supplies received in place of cash wages). Excludes (1) the following kinds of unpaid work: (a) unpaid work that does not contribute to the operation of a family farm or unincorporated business; (b) unpaid work done for a related member of the household who does not operate a farm or unincorporated business but is, himself, a salaried employee; (c) volunteer work without pay for an organization; and (2) time for which a respondent is paid while on temporary duty in the Armed Forces Reserves or National Guard.

With a Job-Not at Work: Respondents who indicate that, for all or most of the survey week, s/he was absent from a job or business for such reasons as illness, vacation, bad weather, labor dispute, temporary or indefinite layoff, etc. This also applies to respondents who were unwilling to cross picket lines even though they were not members of the union on strike.

Looking for Work: Respondents who spent most of the week (1) trying to establish a business or profession or (2) looking for work by engaging in the following kinds of efforts: (a) registering at a public or private employment office, (b) being on call at a personnel placement office, a nurses' register, temporary office register, or other register, (c) meeting with prospective employers, (d) placing or answering advertisements, (e) writing letters or applications, (f) working without pay to get experience and training, (g) checking with a union or any other organization, (h) visiting locations where prospective employers pick up temporary help.

Keeping House: Respondents (male or female) who were primarily engaged with their own home housework during the survey week. This category applies to respondents who say they spent most of their time during the survey week managing or being responsible for the care of their home and for respondents who say their chief activity was the care of their children. It is not necessary for a respondent to be engaged in the actual physical labor of cooking, washing, or cleaning.

Going to School: Respondents who spent most of their time during the survey week attending any kind of public or private school, including trade or vocational schools in which students receive no compensation in money or kind. Includes (1) respondents who would have been going to school except that they were temporarily sick or on a short vacation such as spring or winter vacation and (2) student nurses who spent most of the time during the survey week attending classes. Excludes student nurses who spent most of their time performing ward or other nursing duties for pay or pay in kind.

Unable to Work: Respondents who, because of their own long-term physical or mental illness or disability, are unable to do any kind of work. Physical or mental illness or disability means something specific and not a combination of minor disabilities that normally come with advanced age. The specific illness must be of such severity that it completely incapacitates the individual and prevents him/her from doing any kind of gainful work. This category would not include, for example, a youngster with a mental handicap who is able to help on the family farm. S/he should be coded "unable to work" only if s/he could not perform any kind of work. Likewise a truck driver who says s/he is unable to drive a truck because of a heart condition but who might be able to do less strenuous work should not be coded "unable to work." Excluded are those who are temporarily ill or disabled and who expect to be able to work within six months of the time of interview. If the respondent is reported as ill or disabled and no definite indication is given of the time the illness or disability is expected to last, interviewers are instructed to find out from the respondent (and not to use their own judgment or observation) whether s/he expects to be able to return to work within six months.

Other: Respondents whose activity or status cannot be described by the codes defined above. Includes respondents who report that they are taking it easy, working without pay for a neighbor, doing volunteer work, on summer vacation from school, participating in a work relief program, performing jury duty, only in the Reserves or only on National Guard duty, or participating in a government (Federal, State, or Local) program.

Source: NLS Round 12 Question by Question Specifications. Chicago, IL: NORC-4512, University of Chicago, 1990.

Table 4.27.3 Definitions of NLSY79 Weekly Labor Force Activity Categories: NLSY79 Work History Data

Working: There was at least one job number or employer available for the respondent for a given week, indicating active employment with at least one employer.

Associated with Employer: Linkage with an employer is possible, but information on gaps within the tenure with an employer is not available. If all the time with an employer cannot be accounted for, this labor force status instead of a "working" status is assigned.

Unemployed: Not working, but was either actively looking for work or on layoff.

Out of the Labor Force: Not working, not actively looking for work or on a layoff.

Not Working: Not working, cannot distinguish between unemployed and out of the labor force status. Active Military Service: Actively serving in the military (Army, Navy, Air Force, Marines, Coast Guard).

No Information Reported: Sufficient information to determine labor force status was not reported.

User Notes: It should be noted that respondents can specify the number of weeks, if any, during a gap within or between jobs that they are either looking for work or on layoff. However, specific weeks can not be determined from this information. In these cases, the "unemployed" status is assigned to the middle of such a gap and the "out of the labor force" status is assigned to the remaining weeks on each end of the gap. The DUALJOB array does not contain such information on labor force status. It contains job numbers only in the event that the respondent held more than one job during a given week. If this is not the case, the DUALJOB array contains a "0" code. For more detailed information, refer to the "Work Experience" section of this guide.

Summary Labor Force Status Indicators: A series of summary variables, listed in Table 4.27.4, are created based upon the week-by-week labor force status arrays produced by the NLSY79 Work History program. These summary variables are present on the NLSY79 main data files and provide a count of the number of weeks that a respondent held a given labor force status, i.e., working, unemployed, out of labor force, or in the active Armed Forces. Each summary variable is available for the period since the last interview and in the past calendar year. Variables which indicate the percentage (if any) of weeks not accounted for due to missing data or indeterminate status in the Work History arrays are also calculated.

Table 4.27.4 Created Summary Variables: 1979 to Current Survey

Number of Weeks Service in Active Armed Forces in Past Calendar Year Number of Weeks Service in Active Armed Forces, Last Int to Present

Number of Weeks Out of Labor Force in Past Calendar Year

Number of Weeks Out of Labor Force since Last Int

Number of Weeks Unemployed in Past Calendar Year

Number of Weeks Unemployed since Last Int

Number of Weeks Worked in Past Calendar Year

Number of Weeks Worked since Last Int

Number of Hours Worked in Past Calendar Year/Since Last Int

Number of Weeks Unacctd for in Past Calendar Year/Since Last Int

The first set of variables uses "Past Calendar Year," i.e., the full calendar year previous to the year of current interview, for its summations. The second set, which uses "Last Interview Date" as the starting point, allows researchers to piece together a cumulative set of figures for each respondent (up to the most current point of interview) depicting total number of weeks with a given labor force status. The variables containing the percentage of weeks unaccounted for serve to alert users to the completeness of a respondent's record over time. Because respondents can skip interview years, users should be careful in employing these variables to compose cumulative histories. These variables provide cumulative labor force status for the same period of time for each respondent interviewed in a given year. Comparative analyses can be conducted for a comparable time period across all respondents interviewed in a given year.

Related Variables: Another created variable in this is total number of weeks since the respondent's last interview.

Survey Instruments: See the topical "Work Experience" section of this guide.

Data Files: The cumulative variables discussed above are located in the "Key Variables" file on the main NLSY79 data set and are present in the NLSY79 Work History data. One set of variables exists for each survey year.

Labor Force Status Tables: Tables 4.27.5 and 4.27.6 depict the labor force status, as measured by 'Employment Status Recode' variables, across survey years for the NLSY79 sample as a whole and for respondents by race and gender. Readers should note that these tables contain unweighted frequencies. The tables should only be used as an aid in describing raw frequency counts in these data and must not be used to make inferences about population data.

Readers should also note that the 1994 CPS revisions potentially modified results in these tables. BLS estimates, derived from running the new CPS simultaneously with the old, suggest that the new CPS

slightly increases unemployment rates. Therefore, readers are cautioned that a small number of people classified as unemployed in 1994 and beyond might have been labeled "out of the labor force" according to the old CPS section.

Table 4.27.5 Labor Force Status: NLSY79 Civilian & Military Respondents 1979³–1998⁴ (Unweighted Data)

				In the La	abor Force		Out of the Labor Force				
Year	Total Intv'd	Not Intv'd	Total	Empl'd	Unempl'd	Active Forces	Total	In School	Unable to Work	Keeping House	Other
1979	12686 ²	0	8245	5161	1867	1217	4440	3387	41	473	539
1980	12141	545	8493	5733	1766	994	3648	2542	37	624	445
1981	12195	491	8959	6334	1770	855	3236	1861	58	800	517
1982	12123	563	9116	6593	1698	825	3007	1430	67	965	545
1983	12221	465	9471	6956	1735	780	2750	1019	59	1077	595
1984	12069	617	9663	7562	1394	707	2406	732	67	1105	502
1985	10894	1792	8865	7341	1124	400	2029	455	64	1078	432
1986	10655	2031	8809	7533	948	328	1846	356	56	1064	370
1987	10485	2201	8705	7673	730	302	1780	204	61	887	628
1988	10465	2221	8753	7869	630	254	1712	118	85	1160	349
1989	10605	2081	8823	7942	632	249	1782	106	99	1254	323
1990	10436	2250	8706	7953	542	211	1730	85	144	1180	321
1991	9018	3668	7516	6738	594	184	1502	73	103	1013	313
1992	9016	3670	7540	6775	602	163	1476	67	116	991	302
1993	9011	3675	6952	6195	520	237	1555	65	123	1046	321
1994	8889	3795	7402	6794	477	131	1487	n/a³	59	n/a³	1428
1996	8636	4050	7242	6729	406	107	1394	n/a³	176	n/a³	1218
1998	9332	4287	8068	6712	331	92	1264	n/a³	131	n/a³	1133

Note: Includes civilian and military respondents residing overseas.

¹ The NLSY79 Employment Status Recode was not created for the 2000 round of the survey.

² Includes one respondent with a missing value on 'Employment Status Recode.'

³ The NLSY79 Employment Status Recode options changed in 1994 due to the CPS revisions. While options such as going to school and keeping house are no longer available within the ESR, these data are still available in other CPS variables.

⁴ Numbers are derived for this table from the CPS section. Since no CPS section was administered in 2000 there are no 2000 numbers available.

Table 4.27.6 Labor Force Status: NLSY79 Civilian & Military Respondents by Gender & Race/Ethnicity 1979–1998

Year	Total Intv'd	Total Males	Empl'd	Active Forces	Unempl'd	Out of Labor Force	Total Females	Empl'd	Active Forces	Unempl'd	Out of Labor Force
					Non-Black/N	Non-Hisp	anic				
1979	7510	3790	1764	580	410	1036	3720	1685	317	429	1289
1980	7201	3620	1901	458	442	819	3581	1815	243	409	1114
1981	7206	3617	2081	360	510	666	3589	1968	192	351	1078
1982	7187	3614	2215	338	466	595	3573	2055	164	347	1007
1983	7250	3658	2338	327	502	491	3592	2158	127	330	977
1984	7124	3577	2540	297	339	401	3547	2275	118	277	877
1985	6230	3040	2310	174	254	302	3190	2175	23	206	786
1986	6100	2965	2353	139	244	229	3135	2200	20	182	733
1987	6025	2906	2425	128	160	193	3119	2188	21	128	782
1988	6025	2926	2544	106	116	160	3099	2205	18	127	749
1989	6068	2932	2553	109	123	147	3136	2197	18	126	795
1990	5988	2891	2547	91	85	168	3097	2206	15	115	761
1991	4557	2255	1955	79	117	104	2302	1689	8	86	519
1992	4545	2252	1976	68	110	98	2293	1664	7	116	506
1993	4529	2240	1940	100	83	117	2289	1666	11	81	531
1994	4468	2218	1990	51	68	109	2250	1646	3	89	512
1996	4337	2153	1952	39	55	107	2184	1634	3	72	475
1998	4142	2073	1887	36	42	108	2069	1651	3	59	454
					ВІ	ack					
1979	3173	1612	538	162	370	542	1561	400	81	359	721
1980	3050	1540	639	156	309	436	1510	494	78	300	638
1981	3080	1563	706	169	324	364	1517	566	68	301	582
1982	3054	1539	699	192	332	316	1515	590	64	299	562
1983	3064	1545	744	194	316	291	1519	639	57	302	521
1984	3048	1535	860	177	292	206	1513	722	48	274	469
1985	2843	1419	880	129	249	161	1424	768	20	233	403
1986	3017	1613	934	113	179	160	1404	823	14	196	371
1987	2750	1362	966	100	142	154	1388	888	14	184	302
1988	2742	1377	1006	83	129	159	1365	884	12	148	321
1989	2770	1386	1012	77	139	158	1384	883	12	144	345
1990	2719	1365	1008	68	124	165	1354	893	12	129	320
1991	2699	1345	966	62	142	175	1354	859	10	137	348
1992	2699	1353	971	52	139	191	1346	884	10	114	338
1993	2722	1365	960	74	126	205	1357	865	15	114	363
1994	2699	1344	1001	45	101	197	1355	898	9	109	339
1996	2642	1312	976	38	100	198	1330	926	9	89	306
1998	2537	1235	963	29	67	176	1302	960	10	90	242

Table 4.27.6 Labor Force Status: NLSY79 Civilian & Military Respondents by Gender & Race/Ethnicity 1979–1998 (continued)

Year	Total Intv'd	Total Males	Empl'd	Active Forces	Unempl'd	Out of Labor Force	Total Females	Empl'd	Active Forces	Unempl'd	Out of Labor Force	
	Hispanic											
1979	2002	1000	436	53	163	348	1002	338	24	136	504	
1980	1890	932	479	43	185	225	958	405	16	121	416	
1981	1909	951	551	50	173	177	958	462	16	111	369	
1982	1882	935	585	56	149	145	947	449	11	105	382	
1983	1907	945	576	65	181	123	962	501	10	104	347	
1984	1897	943	644	58	123	118	954	521	9	89	335	
1985	1821	912	675	50	107	80	909	533	4	75	297	
1986	1765	886	699	39	82	66	879	524	3	65	287	
1987	1710	848	678	37	61	72	862	528	2	55	277	
1988	1698	850	703	33	53	61	848	527	2	57	262	
1989	1767	878	723	29	57	69	889	574	4	43	268	
1990	1729	856	726	22	45	63	873	573	3	44	253	
1991	1762	871	702	22	64	83	891	567	3	48	273	
1992	1772	876	706	22	66	82	896	574	4	57	261	
1993	1760	859	686	31	60	82	901	582	6	56	257	
1994	1722	847	693	19	42	93	875	566	4	68	237	
1996	1657	810	660	16	40	94	847	581	2	50	214	
1998	1622	792	659	11	32	90	830	592	3	41	194	

NLSY79 Children

Data are available on the work activity of those children who were age ten and over at the interview date as well as on each mother's survey week activity and work history during quarterly periods preceding and following the child's birth.

- 1. Child's Work Activity: The 1988–2000 surveys collected information from children who were 10 years of age or older on whether they worked for pay outside of their own home doing such jobs as delivering newspapers, babysitting, office, food service, or yard work. Additional information gathered includes how often the child worked, number of hours worked in a usual week during the past three months, and usual weekly earnings. Since 1994, the children aged 15 and older, the young adults, have responded to an extensive list of questions pertaining to their usual work experience. The young adults were also asked the number of hours they would like to be working and their reasons for not working.
- 2. Mother's Labor Force Status: Using data from the NLSY79 Work History File, variables were constructed detailing each mother's employment history for the period surrounding the birth of her child, i.e., up to four quarters prior to birth and each 13-week interval since the child's birth for a

period of five years. While no specific status variables are present within this series, users can derive a quarterly employment status variable ("with a job" versus "with no job") from the quarterly 'Number of Jobs Held by Mother in X Quarter before/after Birth of Child' variables.

Survey Instruments: The labor force status questions can be found within the Employer Supplement sections of the NLSY79 Young Adult Questionnaires. In the 1994, 1996, and 1998 surveys, the young adult questionnaire included both a CPS and "Gaps in Employment" section nearly identical to these sections in the main youth. By 2000, both of these sections were eliminated.

Data Files & Documentation: Descriptions of the child-specific work activity variables can be found within the "CSAS" areas of interest on the child compact disc. The quarterly work history variables have been placed within the "Work History" area of interest on the child CD.

4.28 Marital Status, Marital Transitions & Attitudes

This section reviews the marital status and transition data available for NLSY79 respondents. It also describes the special NLSY79 and NLSY79 Children marital attitudes and expectations data collections and young adult dating and cohabitation information.

NLSY79

Marital Status: Marital status information for NLSY79 respondents is available from (1) responses to questions fielded during the annual or biennial surveys; (2) two sets of created variables specifying marital status as of the interview date; and (3) an item on the marital status of each respondent as of the previous interview derived from the interviewing aid called the *Information Sheet*.

The marital status of each respondent, i.e., whether he or she was married, widowed, divorced, separated, or never married, was collected during the 1979 survey and is available as a single variable, 'Marital Status.' The 1980–87 interviews collected change in marital status information. During the 1988 and subsequent surveys, 'Current Marital Status' interview checks are included in the questionnaire to verify separately the marital status of respondents who report a change in status since the date of last interview and respondents who do not.

Two created variables provide data on the respondent's marital status, incorporating any changes, as of each interview date. The first set of yearly created 'Marital Status' variables is constructed with coding categories of "never married," "married," "separated," "divorced," and "widowed." Although two additional categories, "remarried" and "reunited," are present within the "Marital History" section of the questionnaire, those respondents who are remarried or reunited are simply coded as "married" in the created variable series. A collapsed version of this variable that codes the respondent's status as "never married," "married spouse present," or "other" is also available. Prior to 1988, marital status was created based on the last actual stated change in marital status. Marital status for 1988 and subsequent survey years has been created from the interview checks mentioned above. Since 1980, a marital status variable has been available from each interview's *Information Sheet*. This variable reflects the respondent's current marital status as of the date of the last interview. Coding categories are similar to those for the created marital status variables but differ slightly across years.

In addition to these data, information is available on respondents' age at first marriage, the presence of opposite-sex partners, and the marital status of household members. The 'Age Began 1st Marriage' variable series has been created for 1982 through the present from the created 'Month/Year Began 1st Marriage' variables (see "Marital Transitions" below) and from the 1979 date of birth.

Prior to 1982, presence of a partner was indicated by an interview check coded "yes" if the respondent lived with one unrelated adult of the opposite sex ('Int Check - Does R Live With Opposite Sex Adult as a Partner'). From 1982–86, Version C of the *Household Interview Form*, completed by those who lived in their own dwelling unit or in military family housing, asked those respondents who were living with at least one unrelated adult of the opposite sex but no spouse whether they lived with a partner. Since 1987, only one version of the *Household Interview Form* has been used; all respondents not living with a spouse have been asked about opposite-sex partners. The partner variable originating from the household interview is titled 'Currently Living as Partner with Opposite Sex Adult'.

The marital status of household members is available from the 1978 household screening only, e.g. 'Household Screener: Family Member #1 - Marital Status.' Categories include "presently married," "widowed," "divorced," "separated," and "never married/annulled."

Marital History/Transitions: A series of edited Supplemental Fertility File variables (area of interest "Fertility and Relationship History/Created") that reflects the beginning and ending dates of marriages was constructed for 1982 through the present. These variables include the month and year the respondent began a first, second, or, beginning in 1988, a third marriage and the month and year a first or second marriage ended, e.g., 'Month Began 1st Marriage.' Unedited data items 1979 include 'Number of Marriages,' 'Month/Year of 1st/Most Recent Marriage,' and 'Month/Year During Which 1st Marriage Ended.' For all subsequent years, 'Change(s) in Marital Status Since Last Interview' are described. Users should note that a separate category for the transition to "reunited" was not added until the 1981 survey. Evaluations of the marital history data for the NLSY79 can be found in Haurin (1988, 1994). A related variable, also located in the "Fertility and Relationship History/Created" area of interest, provides the number of months between the respondent's first marriage and the birth of the respondent's first child.

Cohabitation: The following cohabitation information is available from the 1990 and 1992–2000 surveys: (1) the month and year the respondent and his/her opposite-sex partner began living together; (2) whether the respondent lived with his/her spouse before marriage; (3) the month and year the respondent and his/her spouse began living together; and (4) whether the respondent and his/her spouse lived together continuously until marriage. A household member's relationship to the respondent may be listed as "partner" in the "Household Record" portion of the *Face Sheet*, which is filled out during the yearly household interview. This is true regardless of whether the "partner" is of the same or opposite sex as the respondent. However, only opposite-sex partners are referenced during the interview for questions relating to household, income, and dating/relationship.

Spousal Characteristics: Information collected as part of the household roster is available for spouses and partners at each survey point if they are listed as members of the household. Users first need to identify

the appropriate relationship to the respondent (i.e., code "1" for spouse; code "33" for partner) via variables that are specific for this purpose. Typically, information on the age, relationship to respondent, highest grade of schooling completed, and employment in the past calendar year is collected during each survey. See the various topical sections of this guide, such as "Age," "Educational Status and Attainment," and "Household Composition" for information on specific characteristics.

User Notes: Collection of information on partners as distinguished from spouses has varied over time in the NLSY79. To some extent, the term partner is used more interchangeably in sections of the questionnaire such as "Fertility" and "Childcare" than in sections such as "Marriage" and "Income and Assets," where items may specifically include or exclude partners. Users are cautioned not to assume the interchangeability of terms but to carefully check the wording of all the questionnaire items of this type that are of interest.

In addition to information available via the household roster, across time, additional information has been collected on the spouse as part of the "Marital History" section of the questionnaire. The month and year of birth of the most recent spouse has been collected at each interview. For respondents who are widowed, the month and year of their spouse's death is available as part of the marriage end dates collected in the core marital transition history for each survey.

From 1980 to 1982, questions were included that updated the spouse's educational enrollment status and additional education completed since the last survey. Since 1979, information has been collected during each interview on the usual occupation of the spouse (Census 3-digit code), weeks worked in the past year, hours worked per week in the past year, number of weeks not working in the past year, and number of weeks the spouse was looking for work or on layoff. In 1982, 1998, and 2000 respondents answered questions concerning their new spouse's current religious affiliation, attendance at religious services, and religion in which the spouse was raised. During the 1982 interview, information was gathered on whether the spouse had a health condition that limited the amount or kind of work he/she could do, the month and year the health condition began, and the effect of the spouse's health condition on the respondent's work (e.g., prevent work; work more or fewer hours; or affect the schedule, kind, or location of the respondent's work).

Beginning with the 1986 survey, data on the kind of employment shift worked by the spouse has been collected. This information began with a single question eliciting the type of shift (e.g., regular day, evening, split, or hours vary) in 1986 and has gradually expanded to include questions on the time the spouse usually begins and ends work on the current job as well as other details. Similarly, in 1990 a series of questions was added to the "Marital History" section of the questionnaire that collects information on

the rate of pay at the spouse's current job. This series also began with only a few questions and has expanded to gather significantly more detail, such as information on overtime pay, etc. Users should consult each relevant survey year's questionnaire or codebook to ascertain the specific items collected in the given year. Information on income has been selectively collected for the respondent's spouse or partner. Users should see the topical section on "Income" in this guide for further details.

Marital Attitudes and Expectations: A series of relationship satisfaction questions were asked during the 1988, 1992, and 1994–2000 interviews of those mothers living with a spouse or opposite-sex partner. These questions dealt with both positive and negative interactions in the relationship, e.g., 'Frequency R and Husband/Partner Calmly Discuss Something' and 'Frequency R and Husband/Partner Argue About - Money.' In addition, mothers without a spouse or partner were asked for information on 'Frequency R Goes Out on Dates,' whether the 'Oldest Child Encourage(s) R's Dating,' and 'Likelihood of Marriage in the Future.' In 1979, all never married respondents were asked for information on 'Age Expects to Marry.'

Environmental Characteristic Data: For the 1979–82 interview years, the Geocode CD-ROM includes marriage and divorce rates and percent of families with female heads of household for the county and SMSA in which the respondent resided. These statistics are taken from the 1972 and 1977 County & City Data Books. From 1983 until 1996, marriage and divorce rates and the number of families with a female head are included for county of residence only, based on statistics from the 1983 and 1988 County & City Data Books. The 2000 release will include the same information based on statistics from the 1988 and 1994 County & City Data Books, similar to the 1998 release.

Survey Instruments: The "Marital History" section (Section 2) of the questionnaire has collected information on each respondent's marital history as of 1979, as well as all subsequent changes in marital status. Questions regarding presence of an opposite-sex partner in the household are located on the Household Interview Forms (Version C for 1982–86). The 1979–81 interview checks on partners can be found in the "Assets and Income" section. The 1988, 1992, 1994, 1996, 1998, and 2000 dating and relationship series for mothers can be found in Section 10, "Child Care." The 1979 marriage expectations questions are located in Section 22, "Aspirations and Expectations." The set of 1979 variables on marital status of household members was derived from the 1978 Household Screener. Copies of the yearly Information Sheet, from which the previous interview marital status variables are derived, can be found near the beginning of the yearly Question by Question Specifications (Q by Q) for all survey years except 1980 and 1988. Information Sheet marital status variables by reference number are available within the documentation package for 1988 and subsequent years.

Documentation: Information on the creation of the marital status and collapsed marital status variables is presented in the "User Notes" below. General information regarding creation of the Supplemental Fertility File (area of interest "Fertility and Relationship History/Created"), including marital transition data, age at first marriage, and months between first marriage and first birth, is found in "Appendix 5: Supplemental Fertility Files" in the *NLSY79 Codebook Supplement*.

Data Files: The "Key Variables" area of interest includes the created marital status variables. Raw data on marriages, marital status changes, and spouse characteristics, along with the 1988, 1992, 1994, 1996, 1998, and 2000 series on attitudes of mothers, are located in the "Marriage" area of interest. Variables from the Information Sheet can be found in "Last Interview Information." Variables on the presence of an opposite-sex partner are included in the "Misc. xxxx" area of interest, except for the 1979–81 interview checks, which are located in "Income." Variables for marital status of household members from the Household Screener are located in "Misc. 1979." Constructed marital history/transitions, age at first marriage, and months between first marriage and first birth variables are in "Fertility and Relationship History/Created." The 1979 question about expected age of marriage can be found in "Attitude." Marriage/divorce rate variables for respondents' area of residence are located in the yearly "Geocode xxxx" areas of interest available on the Geocode CD.

User Notes: A detailed memo, "Inconsistencies in the NLSY79 Marital History Data" (Haurin 1988), identifies those respondents whose marital histories through the 1986 survey contained inconsistencies; it also summarizes the edits made, if any, to each case during preparation of the 1986 Supplemental Fertility File (area of interest "Fertility and Relationship History/Created").

Researchers using the constructed marriage dates should be aware that there is a very small percentage of people who have ended their third marriage or have entered a subsequent one. The use of information from the *Information Sheet* to designate respondents' current marital status is not encouraged because this information is dated. However, *Information Sheet* data do permit users to detect inconsistencies reported over time. The program statements used to create marital status for the 1992 survey years are listed in Table 4.28.1. Creation procedures for other years after 1988 are almost identical to the procedure presented here, except that different reference numbers are used in the 1989-1996 PL/1 code and the code was converted to SPSS in 1998. Prior to 1988, interview checks verifying marital status at the previous interview did not exist in the questionnaire; marital status was created based on the last actual stated change rather than an interviewer check or verification of the status last reported.

Table 4.28.1 Expanded and Collapsed Marital Status: NLSY79 1992

```
/* EXPANDED & COLLAPSED MARITAL STATUS 1992*/
MARST_EXPAND=-4;
MARST COLLAP=-4;
IF WEIGHT92=0 THEN DO;
  MARST_EXPAND=-5; MARST_COLLAP=-5;
 ELSE DO:
  IF R(37017.)>=0 THEN MARST_EXPAND=R(37017.);
  ELSE IF R(37030.)>0 THEN MARST EXPAND=R(37030.);
  IF MARST_EXPAND=0 THEN MARST_COLLAP=1;
  ELSE IF MARST_EXPAND=1 & SPOU92=1 THEN MARST_COLLAP=2;
  ELSE IF MARST EXPAND>0 THEN MARST COLLAP=3;
  ELSE MARST_COLLAP=-3;
 END;
MARST_COLLAP=R(40072.);
MARST_EXPAND=R(40073.);
/* SPOU92 INDICATES IF A SPOUSE IS LIVING IN THE HOUSEHOLD (0=NO, 1=YES).
  TO CREATE SPOU92:

    INITIALIZE SPOU92=0.INITIALIZE SPOU92=0.

   SET SPOU92=-5 IF NOT INTERVIEWED IN 1992 (I.E., IF WEIGHT92=0).
   SEARCH THROUGH THE HOUSEHOLD ENUMERATION AND COMPUTE SPOU92=1 IF THE
   RELATIONSHIP TO YOUTH IS CODED AS A SPOUSE (CODE=1). */
```

References

Haurin, R. Jean. "Inconsistencies in the NLSY79 Marital History Data—1986 Supplemental Fertility File." Columbus, OH: CHRR, The Ohio State University, 1988.

Haurin, R. Jean. "Marriage and Childbearing of Adults: An Evaluation of the 1992 National Longitudinal Survey of Youth." Columbus, OH: CHRR, The Ohio State University, 1994.

Mott, Frank L. "Selected Mother and Child Tabulations from the 1984 (Sixth Wave) Survey of the National Longitudinal Study of Work Experience of Youth." Columbus, OH: CHRR, The Ohio State University, 1988.

NLSY79 Children

Marital Status: Information on whether each mother's spouse or partner is present within the mother's household is available on the Child CD for each survey year; variable titles are 'Is Spouse of Mother Present in HH of Mother' and 'Is Partner of Mother Present in HH of Mother.' In 1994, 1996, 1998, and 2000, information on the current marital and cohabitation status of the children aged 15 and older, the young adults, as well as a marital/cohabitation history was also collected.

Marital Attitudes and Expectations: During the 1988–2000 child assessment surveys, children 10 years and older indicated what they thought were the best age and the youngest age to get married, i.e., 'What is the Best Age to Get Married?' In 1994, 1996, 1998, and 2000, the same series of relationship satisfaction

questions that was administered to the main youth respondents was also administered to the young adults living with spouses or partners.

Survey Instruments: The 1988–2000 Child Self-Administered Supplements contain the series of marital attitude questions asked of children 10 and older. In 1994, 1996, 1998, and 2000, these questions are contained in the Young Adult Self-Report Booklet for children 15 and older. The questions pertaining to marital status as well as the series of relationship satisfaction questions can be found in the "Dating and Relationship History" sections of the 1994 and 1996 NLSY79 Young Adult Questionnaires. The "Survey Instruments" section of the NLSY79 discussion above contains additional information on the data collection for mothers.

Data Files & Documentation: Presence of mothers' spouse/partner variables are described in the "Household Composition" sections of the NLSY79 Child Codebook. Users will find the 'Presence of Spouse' and of 'Partner' variables in the child "Mother's Household Composition" area of interest and the child attitude variables in "CSAS." All other variables related to maternal marital history or status must be accessed through the mothers' variables on the main youth files.

4.29 Military

NLSY79

The NLSY79 is unique in that respondents are chosen from both the civilian and military populations. Since most surveys focus on one or the other, researchers rarely can compare outcomes simultaneously for both groups. Funding by the U.S. Department of Defense in the early years of the survey and continued interest by BLS has enabled the NLSY79 to collect a large amount of data on military occupations, training, wages, and testing scores.

Although funding cutbacks reduced the size of the military sample in 1985, military questions continue to be a part of every NLSY79 survey. Researchers will find that the questionnaires from 1979 to 1985 contain substantial information on military experience. While questionnaires from 1986 to 2000 contain less information, the interviews continued to ask respondents about key variables such as military enlistment, pay, and training. Researchers should note that respondents age 16 and under at the 1979 interview were not asked any military service questions; this group was asked three questions concerning attitude toward military service and the possibility of enlisting in the future.

NLSY79 military members consist of two groups. The first group is a special oversample of members of the Armed Forces. This group, which in 1979 included 1,280 respondents, was reduced to 201 respondents in 1985 because of funding cutbacks. The second group consists of NLSY79 respondents who joined the military while part of the sample. For example, in 1979 (R00431.) 508 respondents stated that they would "definitely try to enlist in the Armed Forces in the future." For more information on the sample composition, interested readers should refer to Chapter 2, "Sample Design and Attrition."

Table 4.29.1 shows the number of NLSY79 respondents who are in the active military by year and the number of individuals who have enlisted in any branch of the service since the last interview. Researchers must understand the difference between active and reserve duty. Large portions of the military section are either skipped or answered depending on a respondent's active or reserve duty status. Many people believe that active duty personnel are in full-time military jobs while reserve duty are part-time military jobs, but this is not the case. While many reservists serve two weeks a year, a number of reservists are employed full-time, year-round by the Armed Forces. A more complete picture of military service is gained by examining data on both active and reserve personnel.

While Table 4.29.1 shows a steadily falling number of active duty personnel, it also shows that a large number of respondents are enlisting in the Armed Forces. A careful look at the data suggests that many of the NLSY79 active duty personnel enlist in the reserves when their active duty term is finished.

Table 4.29.1 Number of NLSY79 Respondents in the Active Armed Forces and Number Who Enlisted in Any Branch in That Year

Year	In Active Forces	Enlisted Any Branch	Year	In Active Forces	Enlisted Any Branch
1979	1218	(NA)	1989	249	36
1980	994	212	1990	211	30
1981	855	251	1991	184	19
1982	825	254	1992	163	20
1983	780	228	1993	145	10
1984	707	162	1994	134	8
1985	400	93	1996	107	11
1986	328	87	1998	92	6
1987	301	53	2000	58	5
1988	257	63			

Note: Each year the NLSY79 contains a variable that states if the respondent enlisted during the past year (e.g., R02326. in 1980).

User Notes: While there is no created NLSY79 variable that identifies members of the active forces, there is a simple method of identifying these individuals through 1993. Active members of the Armed Forces can be indirectly identified by the first CPS question. The CPS section should not be answered by active duty personnel (but should be answered by reservists) since it pertains only to civilian work. Hence, individuals who are valid skips (-4) for the question entitled "Activity During Most of the Survey Week" are on active duty (also see the "Labor Force Status" section of this guide). In 1994 and subsequent years, there is a machine check variable identifying members of the active forces (e.g., R45358. in 1994).

There is no similar simple method of identifying reservists; researchers must instead create their own military event history. The NLSY79 data set contains information on the date an individual left the most recent branch of service and the date the respondent enlisted in a service branch. When following these variables for an individual, researchers should note that a number of respondents switch branches of the service and hence report a military stop and start date during a single interview.

The NLSY79 contains more than 1,500 variables pertaining to life in the Armed Forces. The following sections explore some of these variables in more depth. Researchers should note that military information can be combined with other NLSY79 data to provide useful insights into residence characteristics, marital status, fertility, and schooling while an individual serves in the Armed Forces.

Military Occupation: Questions about military occupations were asked in 1979–85. In each year, respondents in the military were asked to report their primary military occupation (e.g., R16324. in 1985) and their secondary occupation (R16337. in 1985). These questions were part of a section that also asked

for information about how much training the respondent had recently received. Researchers who use the Census Bureau's 3-digit occupation codes should note that while military occupations also are coded with 3-digit codes, the classification scheme is completely separate. CHRR coded military occupations with codes developed by the Department of Defense (1977). Users interested in a respondent's Military Occupation or Specialty (MOS) should search for MOS for Army, Marine Corps, and National Guardsmen. Respondents in the Navy or Naval Reserves are classified by their "Primary Rating," while Air Force and Air Force Reserves respondents are classified by their "Air Force Specialty Codes (AFSC)."

Military Training: One focus of the NLSY79 military section is training. In 1980 members of the active Armed Forces were asked why they enlisted in the military (R02516.). The most important reason cited by the majority (217 respondents out of 993) was "To get trained in a skill that will help me get a civilian job when I get out." To understand military training, surveys prior to 1986 asked each respondent about the primary and secondary job for which they were trained.

Pre-1986 surveys also asked military respondents about the number of weeks of formal training received in the military, the amount of on-the-job training, and the amount of formal schooling. Each survey also contains two questions that explore the usefulness of military training for civilian life. One question asks if the respondent is doing the same kind of work in civilian life as in the military; the second asks if the respondent uses any skills learned in the military in any civilian jobs. Researchers interested in more details on how military training is transferable to civilian work should see Mangum and Ball (1986).

Military Pay and Bonuses: The NLSY79 contains a large amount of information on military pay and bonuses. During the early years of the survey, pay information was collected for individuals in the military, individuals in the reserves, and individuals who had separated from the military. Additional information was gathered on the amount of educational and enlistment benefits received. Finally, for individuals who left the Armed Forces, some interviews contain information on the primary reason for separation. A number of respondents stated low pay as their primary reason for leaving the military. Table 4.29.2 summarizes pay variables for members of the military.

Table 4.29.2 Military Pay Variables in the NLSY79 1979 Cohort

Variable	1979	1980- 1985	1986- 2000	Variable	1979	1980- 1985	1986- 2000
In Service: Current Pay Grade	*	*	*	Participate in VEAP? ¹	*	*	*
Monthly Pay	*	*		Amount VEAP Benefits		*	*
In Reserves: # Weekly Drills Paid	*	*		Participate in Tuition Assistance		*	
Number of Weeks Served on Duty	*	*		Tuition Amount		*	
Left Service: Last Pay Grade	*	*	*	Received Enlistment Bonus, Amount	*	*	
Last Monthly Pay	*	*		Received Reenlistment Bonus, Amount	*	*	

¹VEAP questions are now combined with other educational benefits.

ASVAB Administration: During the summer and fall of 1980, NLSY79 respondents participated in an effort of the U.S. Departments of Defense and Military Services to update the norms of the Armed Services Vocational Aptitude Battery (ASVAB). NLSY79 respondents were selected because they comprised a pre-existing, nationally representative sample of young people born from 1957 through 1964. This testing, which came to be referred to as the "Profiles of American Youth," was conducted by NORC representatives according to standard ASVAB procedure guidelines.

A composite score derived from select sections of the battery can be used to construct an approximate and unofficial Armed Forces Qualifications Test score (AFQT), a general measure of trainability and a primary criterion of enlistment eligibility for the Armed Forces, for each youth. For more details on the AFQT and ASVAB, refer to the "Aptitude, Achievement & Intelligence Scores" section of this guide.

Survey Instruments: The questions on the military are located in the following sections of the NLSY79 questionnaires: Section 7 (1979), Section 6 (1980), Section 5 (1981), and Section 4 (1982–2000).

Data Files: The variables may be found within the "Military" area of interest on the CD-ROM.

Reference

Mangum, Stephen and Ball, David. Occupational Skill Training and Transferability: How Does the Military Fare? Proceedings of the Thirty-Ninth Annual Meeting, Industrial Relations Research Association (1986) 412–21.

U.S. Department of Defense, Manpower Reserve Affairs and Logistics. *Occupational Conversion Manual*. Alexandria, VA: D.M.D.C., 1977.

NLSY79 Children

The young adult questionnaire has a military section similar to the main NLSY79. However, the young adults are asked for greater detail about military jobs and training. To find these variables, users should search for the "Military" area of interest on the Child/Young Adult CD.

4.30 Occupations

NLSY79

Regularly fielded sections of NLSY79 survey instruments have collected information on the occupation of respondents' current/last job, jobs since last interview, military job, vocational/technical or government training programs, type of job to which they aspired, and, for those unemployed and out of the labor force, the kind of occupation they were seeking or planned to seek. In addition to this respondent-specific information, data on occupations are also available for other family members, including the spouse and parents of the respondent. Finally, the 1980 school survey collected data on the types of vocational/technical training offered within a respondent's high school.

Verbatim responses to open-ended questions eliciting information on kinds of work or training are entered directly into the survey instrument by the interviewer and subsequently coded by NORC staff using one or more occupational coding schemes. The occupational classification systems listed in Table 4.30.1 have been used to code occupations within the yearly NLSY79 surveys. Background information on the development of the 1980 classification system and the relationship between the 1970 and 1980 coding categories is available in the 1989 Census publication listed in this section's references.

Table 4.30.1 Occupational Coding Classification Systems: NLSY79

- 1. The 3-digit 1970 Census classifications (U.S. Census Bureau 1971) are used to code all job and training questions as well as the occupational aspiration series found in the questionnaires and *Employer Supplements*.
- 2. Beginning with the 1982 survey, the 3-digit 1980 Census codes (U.S. Census Bureau 1981) have been used, in addition to the 1970 codes, to classify occupations of respondents' current or most recent job.
- 3. The 1977 military occupational specialty codes (U.S. Department of Defense 1977) are used to classify responses to the 1979–85 questions on military jobs and military occupations.
- 4. The 1979 CPS job is coded using the Duncan Index of occupational prestige. The scores, ranging from 0 to 97, may be interpreted either as estimates of prestige ratings or simply as values on a scale of occupational socioeconomic status. For details, see Duncan (1961).

Survey Instruments: Data on occupations have been collected within various topical sections of the NLSY79 questionnaires: "Current Labor Force Status," "Regular Schooling," "Government Training," "Military," "Family Background," etc. The yearly Employer Supplements collect occupational information on the type of job performed for a given employer. The separately administered 1980 School Survey was used to collect information on types of vocational and technical courses offered by those schools surveyed.

Data Files & Documentation: Occupational data for the NLSY79 are found within various areas of interest, e.g., "CPS," "Job Information," "Military," "Misc. xxxx," "School," "Training," "Marriage," "Family Background." "Attachment 3: Industry and Occupation Codes" in the Codebook Supplement

provides the detailed codes for the Census and DOD classification systems discussed above. The *NLSY High School Transcript Survey: Overview and Documentation* contains a copy of the school survey that asked about vocational/technical course offerings.

User Notes: "Employer" is the unit for which occupations are asked in the NLSY79. Thus changes in occupation are not asked directly but rely on the accuracy of coding across survey years. Users should be careful in making inferences about occupational and/or industry mobility as miscoding is present. When industry codes for the same employer in adjacent interview years are compared (see NLSY79 Work History Data), it has been found that respondents use slightly different words to describe their industry/occupation and coders may interpret the same words in different ways in different years. When one code is missing, occupational descriptions are used in creating industry codes and vice versa. Therefore, workers who change occupations, even though they stay in the same firm, may tend to generate changes in industry codes.

The 1979 occupation and industry codes for Job #1 (the CPS job) are only blank placeholders, due to the structure of the job history and "CPS" sections in the initial survey year (1979). The information is contained in the "CPS" section, but these variables were used as placeholders in anticipation of the future structure of the *Employer Supplement*.

References

- Duncan, O.D. "A Socioeconomic Index for All Occupations." In *Occupations and Social Status*, A.J. Reiss, Jr. et al. New York: Free Press, 1961.
- U.S. Census Bureau. 1960 Census of Population Alphabetical Index of Occupations and Industries (Revised Edition). Washington, DC: U.S. Government Printing Office, 1960.
- U.S. Census Bureau. 1970 Census of Population Alphabetical Index of Industries and Occupations. Washington, DC: U.S. Government Printing Office, 1971.
- U.S. Census Bureau. "1970 Occupation and Industry Classification Systems in Terms of Their 1960 Occupation and Industry Elements." Technical Paper 26. Washington, DC: U.S. Government Printing Office, 1972.
- U.S. Census Bureau. 1980 Census of Population Classified Index of Industries and Occupations. Washington, DC: U.S. Government Printing Office, 1980.
- U.S. Census Bureau. "The Relationship Between the 1970 and 1980 Industry and Occupation Classification Systems." Technical Paper 59. Washington, DC: U.S. Government Printing Office, 1989.
- U.S. Census Bureau. U.S. Census of Population: 1960. Subject Reports. Occupational Characteristics. Final Report PC (2)-7A. Washington, DC: U.S. Government Printing Office, 1960.

- U.S. Department of Defense. "Occupational Conversion Manual: Enlisted/Officer/ Civilian, Defense Manpower Center." Arlington, VA: DOD 1312.1-M, 1977.
- U.S. Department of Labor. "Dictionary of Occupational Titles (Fourth Edition)." Washington, DC: U.S. Government Printing Office, 1977.

NLSY79 Children

Occupation of mother at main job during each quarter preceding and following the birth of a child is available for each child. These variables are coded with 1970 Census codes and the Duncan Index. Additionally, in 1994, 1996, 1998, and 2000, verbatim responses to open-ended questions eliciting information on kinds of work or training from the children aged 15 and older, the young adults, were entered directly on to the instrument and later coded by NORC using both the 1970 (all jobs) and 1990 (CPS job only) Census occupation codes. In 2000 NORC coded using the 1990 (all jobs) and 1970 (CPS job only) Census occupation codes. The 2000 release includes 1990 codes for all jobs coded in the 1994-1998 surveys

Survey Instruments: The young adult questions are located within the Employer Supplement sections of the NLSY79 Young Adult Questionnaires.

Data Files & Documentation: Descriptions of CPS occupations can be found in the "Employment Income" area of interest, and the quarterly variables can be found in the "Work History" area of interest on the child compact disc. "Attachment 3: Industry and Occupation Codes" provides the 1970 Census occupational classification system used to code mother's occupations. Young adult attachments 3 and 4 present the Census classification systems used to code young adult occupations.

4.31 Pension Benefits & Pension Plans

NLSY79

Prior to 1994, pension information for the NLSY79 was restricted to that collected on pension income. The focus, in general, was on receipt of pension, Social Security, or disability income by various household members, e.g., by the respondent's parent's family (parental unit), the respondent and his/her spouse or partner, or other family members. Income from pensions or annuities was seldom differentiated from Social Security income.

- 1. Pension Benefits & Social Security Payments. Information on whether income was received by the respondent and/or spouse from other (unspecified) sources such as Social Security, pensions, or annuities was collected during the administration of each survey's "Income and Assets" section. Follow-up questions asked whether any other family members (1979–2000) or an opposite-sex adult/partner (1979–84, 1990–2000 had received Social Security/Railroad Retirement or pension income in the past calendar year. Household income received by those respondents living in their parental home or by any other household member related to these respondents from (1) governmental or private pensions or annuities or (2) Social Security/Railroad Retirement benefits was collected during the 1979–86 household interviews.
- 2. Disability Payments. Fielded during the 1980–2000 surveys was a set of questions that asked whether the respondent or his/her spouse (and since 1994, "or partner," if applicable) had received any income during the past year from veteran's benefits, Worker's Compensation, or other disability. If such income was received, an amount was recorded.

1994 Changes: Beginning in 1994 and continuing in 1996, 1998 and 2000, the *Employer Supplements* section on fringe benefits was expanded to include a large amount of pension information. The pension questions are asked for each job that a respondent works at 20 hours a week or more. The pension section elicits information from the respondent on the following 11 subjects:

- 1. If eligible for a plan
- 2. How many participating in
- 3. How many plans eligible for with each employer
- 4. Knowledge of each plan
- 5. Number of years enrolled in a plan
- 6. Type of plan
- 7. Employer contributions
- 8. Employee contributions
- 9. Whether choice in investment strategy
- 10. How much the plan is worth
- 11. Investment strategy

In addition, in 1994, 1996, 1998 and 2000 a series of four questions added to the asset section of the questionnaire began to track retirement savings. Prior to 1994 this information was asked for as part of the answers to other asset questions, while in 1994 pension questions were separated out. The first question asks if the respondent/spouse has any IRA accounts. If the answer is yes, respondents are queried about how much money is held in their IRA. Then the respondent is asked if they or their spouse or partner hold any 401k or 403b accounts. If the answer is yes, they are questioned how much money is held in these accounts.

Survey Instruments: Income source questions are located within the "Income & Assets" sections of each questionnaire: Section 21 (1979), Section 17 (1980), Section 12 (1981, 1987, 1989, and 1992), Section 14 (1982 and 1985), Section 13 (1983, 1986, 1990, 1994, 1996, 1998 and 2000), Section 15 (1984 and 1988), and Section 11 (1991 and 1993). The household income questions can be found on Version A of the Household Interview Form. The "Household Composition," "Poverty Status & Public Assistance Support Services," and "Survey Instruments" sections of this guide present additional information on the collection of household and income data.

Data Files: Pension source variables are found in the "Pensions," "Income," and "Misc. xxxx" areas of interest.

4.32 Poverty Status & Public Assistance Support Sources

NLSY79

Two sets of family poverty variables, family poverty status and family poverty level, are available for NLSY79 respondents. In addition, detailed information is provided on public assistance income sources, and a series of environmental variables describe the extent of family and individual poverty within the respondent's geographical area of residence. Family income information collected during the 1978 screening was used to designate the economically disadvantaged oversample of NLSY79 respondents.

Economically Disadvantaged Sample Assignment: The economically disadvantaged non-black/non-Hispanic oversample includes those youth located during the screening who were selected for and completed a base year interview (1) whose family income during the past 12 months (reported by the householder) was equal to or below the 1978 poverty guidelines established for that family size and (2) whose race was coded by interviewer observation as not black or Hispanic, i.e., "non-black/non-Hispanic" or "other" and whose origin or descent (reported by the householder) was neither one of the Hispanic codes nor black, Negro, or Afro-American. A family was designated as in poverty if its income over the past 12 months was equal to or less than \$3140 + (\$1020 * (N-1)) for a non-farm family or equal to or less than \$2690 + (\$860 * (N-1)) for a farm family, where N is the number of persons in the family unit.

Family Poverty Status (1978–2000): Variables have been created for each survey year that indicate whether or not a respondent's total family income for the past calendar year was above or below the poverty level. Information used to create the 1979-2000 poverty variables is derived from either (1) the total family income information provided during the household interview by the parent when the respondent was living in the parental home or (2) the sum of component income sources reported by the respondent (when not living in the parental home) during administration of the "Income" section of each questionnaire. Income sources for the respondent and all persons related to them by blood, marriage, or adoption are included in the calculation. Availability of data for individual respondents has been affected by nonresponse to the income questions. Poverty status data are not available for those respondents who, during post-1986 survey years, had one or more income components missing. Nor are they available for those respondents who, during the 1980-86 interviews, were "refusals" or "don't knows" to both the household interview dollar amount question and a follow-up question requiring a "yes-no" response to a question on level of family income. The method used to create the 1978 family poverty status variable was unique. "Appendix 2 - Total Net Family Income" in the Codebook Supplement provides a narrative description; R02179.30 identifies which of three income sources was used to determine each respondent's status.

Two sets of poverty level indicators have been used across survey years. The yearly poverty income guidelines (issued by the U.S. Department of Health and Human Services and based on Census Bureau poverty guidelines) were used to determine poverty status for the 1978, 1979, and 1987–2000 survey years. Projected poverty income levels computed by CHRR were used for the 1980–86 poverty status variables. More complete information on the calculation procedures developed by CHRR to create 'Total Net Family Income' and 'Family Poverty Status' and to project poverty guidelines for the 1980–86 survey years can be found in "Appendix 2 - Total Net Family Income" in the *NLSY79 Codebook Supplement*. Copies of the official poverty guidelines and the projected 1980–86 cutoff values are included in the appendix.

Family Poverty Level (1979, 1987–2000): The poverty level variables provide the amount of total family income, controlling for family size and state of residence, below which a respondent (and his/her family) would be considered to be in poverty for that year. They are available for those survey years during which CHRR relied on official poverty guidelines for the creation of the 'Family Poverty Status' variables.

User Notes on Poverty Level versus Poverty Status: The poverty level is the level of income below which a family the size of the respondent's is considered to be in poverty. The poverty status is the actual status of the respondent's family vis-a-vis that poverty level.

Public Assistance Support Sources (1979–2000): The "Income" and "Health" sections of each year's questionnaire collects information on amounts and time periods during which cash and noncash benefits were received from such sources as public assistance, Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), food stamps, government rent subsidies, public housing, or welfare-provided health/hospitalization coverage. The universes and types of data collected vary across survey years as indicated in Table 4.32.1.

Table 4.32.1 Sources of Public Assistance Support: 1979–2000 NLSY79

Survey Years	Universe	Source of Assistance	Data Collected
1979–2000	R/spouse/partner ¹	Aid to Families with Dependent Children (AFDC)/TANF after 1996	Whether R spouse/partner received income from, the average monthly income amount, and which specific months since the last interview such income was received
1979–84	Opposite-sex adult	Aid to Families with Dependent Children (AFDC)	Whether opposite-sex adult received such income in past calendar year
1990–93	Partner	Aid to Families with Dependent Children (AFDC)	Whether opposite-sex adult received such income in past calendar year
1979–84	R/spouse	Other (specified and unspecified) Public Assistance	Whether R/spouse received income from, the average monthly income amount, and which specific months since the last interview such income was received
1979–84	Opposite-sex adult	Supplemental Security Income, Other Public Assistance, or Welfare	Whether opposite-sex adult received such income in past calendar year
1990–93	Partner	Supplemental Security Income, Other Public Assistance or Welfare	Whether opposite-sex adult received such income in past calendar year
1980–84	R/spouse	Supplemental Security Income	Whether R/spouse received income from, the average monthly income amount, and which specific months since the last interview such assistance was received
1985–98	R/spouse	Supplemental Security Income, Other Public Assistance, or Welfare	Whether R/spouse received income from, the average monthly income amount, and which specific months since the last interview such assistance was received
1979–98	R/spouse	Food Stamps	Whether R/spouse received income from, amount received most recently, and which specific months since the last interview such assistance was received
1979–2000	Other family member	AFDC or Public Assistance	Whether other family member received income from either source in past calendar year
1979–84	R/other family members	Public Housing	Whether R and other family members lived in such housing in past calendar year
1979–85	R/other family members	Government Rent Subsidy	Whether R and other family members received such a subsidy in past calendar year
1986–2000	R/other family members	Public Housing/Government Rent	Whether R and other family members lived in public housing or received a rent subsidy in past calendar year
1989, 1990 & 1992–2000	R/spouse/or children	Medicaid/Welfare Health/Hospitalization Coverage	Whether Medicaid/welfare was source of health/hospitalization coverage
1998	R/spouse/partner	Targeted Benefits/Assistance	Whether R/spouse/partner received income from, the average monthly amount, and which specific months since the last interview such assistance was received
2000	R/spouse/partner	Targeted Benefits	Whether R spouse/partner received welfare or social service agency support to cover part of wages

¹ Universe includes partner from 1993 survey on.

Poverty Characteristics of Respondent's County (1979–2000)/SMSA of Residence (1979–82): Based on data from the 1977 and 1983 *County & City Data Books*, variables such as percent of families with money income below the poverty level, number of persons below the poverty level, and families with female heads of household below the poverty level are available for each respondent's area of residence on the Geocode CD. The geographical area (county or SMSA) for which these data are available varies across survey years.

Value of Food Stamps: The created variable 'Total Net Family Income,' used to determine a respondent's poverty status, includes in its calculation the noncash value of food stamps. In 1987, a 'Total Net Family Income in Past Calendar Year (Census)' variable was created by CHRR that excluded food stamp income for the 1986 calendar year only. Census poverty calculations for the U.S. do not include the value of food stamps. Hence, NLSY79 income calculations are similar, but not exactly the same as, other national data sets.

Welfare Reform Questions in 1998. In 1998, an additional set of questions was included to solicit information on the effects of welfare reform on certain behaviors of respondents related to seeking assistance. Respondents reporting AFDC or SSI/Other Public Assistance were asked whether they had sought work, enrolled in training/school, or performed community service in response to changing requirements. Respondents not reporting these types of assistance, but reporting a combined R and spouse/partner income of 125 percent of the poverty level or less, were asked whether they had applied for assistance, why they had not received any, and if and how the welfare reform changes affected them. (The determination of poverty level for the purpose of conducting the survey was based on the number of household members. This may be a relatively crude measure of family size, but should result in more conservative estimates, which should tend to include rather than exclude more respondents from this set of questions.) These items are part of the "Income" area of interest.

Created Recipiency Variables. Beginning with the 1996 data release, recipiency event histories are included on the NLSY79 CD-ROM. A set of both monthly and annual recipiency histories were created to minimize the confusion caused by the large number of CAPI and PAPI questions that respondents have answered about money received from Unemployment Insurance, AFDC, Food Stamps, SSI, and other public assistance/welfare programs. For each year between 1978 and the current survey year, the types of variables included for R/spouse unemployment benefits, AFDC/TANF, Food Stamps, and SSI/Other Public Assistance are:

- Amount received each month of each year (if any) for each type of assistance listed
- Source year of information for each month of each year
- Cumulative amounts per year for each type of assistance
- Cumulative amounts per year for AFDC/TANF, Food Stamps, and SSI/Other Public Assistance combined

These variables are updated with each round and may be found in areas of interest "Recipient Month" and "Recipient Year." Existing variables may be updated with retrospective information collected in later survey rounds for those who skipped previous interviews. Creation of these recipiency variables is described in Appendix 15 of the *NLSY79 Codebook Supplement*.

Table 4.32.2 below summarizes respondents' poverty status in 1979 and 1988 by gender and a number of other residence and household characteristics.

Table 4.32.2 Poverty Status by Type of Residence: 1979 & 1988 (Unweighted Data)

			In Paren	tal Home		(Own Dwell	ing Unit	
		Not in	Poverty	In Po	verty	Not in	Poverty	In Po	verty
		1979	1988	1979	1988	1979	1988	1979	1988
			Males						
Race	Hispanic	484	82	220	27	87	456	12	77
	Black	685	142	484	65	62	584	10	96
	Non-Black/Non-Hispanic	1988	210	333	35	357	1914	56	143
Highest	NA	4	2	1	2	0	23	0	0
Grade	Under 12 Years	2354	65	927	45	143	422	26	136
Completed	12 Years or more	799	367	109	80	363	2509	52	180
# Own Children in Household	0 1 2 3 4 5 6 or more	3131 23 3 0 0 0	403 21 8 2 0 0	1024 12 1 0 0 0	114 7 3 3 0 0	390 85 28 3 0	1635 607 507 169 29 7	68 8 1 1 0 0	155 45 51 41 16 5
Current	Rural	670	87	249	30	104	565	22	81
Residence ¹	Urban	2486	340	788	93	396	2224	56	221
Employment	Employed/In Active Forces	1615	374	319	75	402	2815	41	217
Status	Unemployed/Out of Labor Force	1542	60	718	52	104	139	37	99
			Females						
Race	Hispanic	477	58	210	20	116	455	47	142
	Black	617	99	467	68	102	554	66	310
	Non-Black/Non-Hispanic	1743	156	334	26	641	2137	149	300
Highest	NA	1	4	3	2	1	27	1	11
Grade	Under 12 Years	2043	22	822	36	219	293	139	300
Completed	12 Years or more	793	287	186	76	639	2826	122	441
# Own Children in Household	0 1 2 3 4 5 6 or more	2720 95 20 2 0 0	224 53 29 4 3 0	876 109 22 3 0 1	40 38 21 12 2 1	551 233 68 6 1 0	1236 794 785 268 44 17	122 75 43 17 5 0	109 146 249 169 49 17 13
Current	Rural	588	55	276	25	187	671	62	194
Residence ¹	Urban	2248	255	735	88	671	2376	200	547
Employment	Employed/In Active Forces	1271	266	226	42	522	2450	74	245
Status	Unemployed/Out of Labor Force	1566	47	785	72	337	696	188	507

Note: Universe includes respondents who had valid values on 'Family Poverty Status' and 'Type of Residence,' were living in their parental home or own dwelling unit, and who were interviewed in both 1979 and 1988.

¹ Some respondents are missing sufficient data to determine rural-urban residence.

Survey Instruments & Documentation: Public assistance support source questions are located in the "Income & Assets" section of each survey: Section 21 (1979), Section 17 (1980), Section 12 (1981, 1987, 1989, 1990, and 1992), Section 14 (1982 and 1985), Section 13 (1983, 1986, 1994, 1996, 1998, and 2000), Section 15 (1984), and Section 11 (1988, 1991, and 1993). The 1979–86 household series were collected with the Household Interview Forms. "Appendix 2 - Total Net Family Income" describes the creation of the 'Family Poverty Status' variables. Copies of the projected poverty income levels developed by CHRR for those years in which the official poverty income guidelines were not used are provided in the NLSY79 Codebook Supplement.

Data Files: The 'Family Poverty Status' and 'Family Poverty Level' variables are found in the "Key Variables" area of interest. The public assistance support sources variables are in "Income." The county/SMSA of residence poverty characteristic variables are located in the "Geocode xxxx" areas of interest on the Geocode CD. Select variables on total welfare income for other family members and months that the respondent/spouse/partner received income from SSI can be found in the "Misc. xxxx" areas of interest.

NLSY79 Children

Data have been collected during each interview from the children aged 15 and older, the young adults, on whether they had received AFDC, food stamps, public housing, or other sources of public assistance. The questions are structured similarly to those in the main NLSY79.

Data Files & Documentation: The young adult questions are located within the "Income and Assets" section of the 1994, 1996, 1998, and 2000 NLSY79 Young Adult Questionnaire.

4.33 Race, Ethnicity & Nationality

NLSY79

The following race and ethnicity variables are available for NLSY79 respondents: (1) a racial/ethnic variable based on the sample identification code assigned by NORC; (2) a series of self-reported ethnic origin variables collected during the 1979 survey; and (3) a set of interviewer identifications of the race of the respondent at the time of the interview. Race and ethnic origin information is also available for each household member identified during the 1978 household screening. Of related interest is a series of immigration questions, fielded in 1990, that included the collection of information on country of citizenship at the time that foreign-born respondents entered the U.S.

Race/Ethnicity: The variable 'Racial/Ethnic Cohort from Screener' (R02147.) designates the respondent as "Hispanic," "black," or "non-black/non-Hispanic" and provides the basis for weighting NLSY79 data. This variable is collapsed from R01736., 'Sample Identification Code,' a code, e.g., "supplemental male black," "cross-sectional female Hispanic," assigned by NORC to each respondent based on information gathered during the 1978 household screening. In the creation of the 'Sample Identification Code' and thus the 'Racial/Ethnic Cohort' variable, both race and ethnic origin information collected at the time of the 1978 household screening were used. Interviewers conducting the screening were instructed to (1) code race by observation into three categories, "non-black/non-Hispanic," "black," or "other"; (2) inquire about the ethnicity of all household members age 14 or above; but (3) assign ethnicity, without asking, to those members who were under age 14.

Coding procedures used by NORC to assign the "Hispanic," "black," and "non-black/non-Hispanic" identifications to respondents included the following classification guidelines:

- (1) "Hispanics" were those who self-identified as Hispanic, i.e., those with an ethnicity screener code of 1–4 (i.e., 1–Mexican American, Chicano, Mexican, Mexicano; 2–Cuban, Cubano; 3–Puerto Rican, Puertorriqueno, Boriccua; and 4–Latino, Other Latin American, Hispano, or Spanish descent). Persons who did not self-identify as Hispanic but who met the following conditions were also classified as "Hispanic": (1) those who identified themselves in the ethnic origin categories that included Filipino (code 6) or Portuguese (code 13); (2) those whose householder or householder's spouse reported speaking Spanish at home as a child; and (3) those whose family surname is listed on the Census list of Spanish surnames.
- (2) "Blacks" included those for whom race was coded "black" and ethnic origin was "non-Hispanic" or those whose ethnic origin was coded black, Negro, or Afro-American (code 5) regardless of race coding.

- (3) "Non-black/non-Hispanics" included those whose race was coded "white" or "other" and who did not identify themselves as either black or Hispanic in answer to the ethnicity question. Instructions to interviewers for coding race included (1) classifying those of Latin American descent as "non-black/non-Hispanic" unless they were obviously black or of some other non-white race and (2) coding in the "other" category those persons who were Japanese, Chinese, Vietnamese, Asian Indian, Native American, Korean, Eskimo, Pacific Islander, or of another non-black, non-white race.
- (4) Father's race was to be used to assign race for those of mixed descent except for some cases of those under age 14 of Spanish descent. Users should note that this decision rule is different from that applied to the NLSY79 children, for whom the mother's race is used. Spanish origins were to be given preference; if at least one ethnicity mentioned was of Spanish origin, the Spanish origin was to be coded (or, for those under 14, if at least one parent was Hispanic, the Hispanic parent's ethnicity was assigned).

Additional instructions for coding race, ethnic origin, and the racial/ethnic identifier variable can be found in the *Household Screener and Interviewer's Reference Manual* (1978) and in a NORC memo dated 10/4/78 available from NLS User Services.

A series of ethnic identification variables, '1st-6th Racial/Ethnic Origin' and 'Racial/Ethnic Origin with Which R Identifies Most Closely' (R00096.–R00102.), provide extensive ethnicity information. Respondents were asked during the 1979 interviews to name the racial/ethnic origins with which they identified. A listing of more than 20 categories, including "Black," "English," "French," "German," "American Indian," "Irish," "Mexican," "Mexican-American," and "Puerto Rican," were presented on a Show Card. If a respondent offered more than one origin, he or she was also asked for the ethnic group with which he or she most closely identified. Users should be aware that frequency counts for the coding category "Indian American, or Native American" are unusually high. About 5 percent of respondents reported this racial/ethnic origin, compared to Census estimates of approximately 0.5 percent of the population. This may have resulted from some respondents' misinterpretation of the term "Native American." Table 4.33.1 compares frequencies of the 1979 first (or most closely held) ethnic identification with the NORC assigned racial/ethnic identification.

Each interview except the 1987 telephone survey also collected information on the interviewer's direct observation of the race of the respondent ("black," "non-black/non-Hispanic," or "other").

User Notes: Users should note that the interviewer's identification of the respondent's race can be subjective. Researchers should also be aware that no special instructions are provided within the *Question by Question Specifications* as to how the interviewer is to code race.

Table 4.33.1 Ethnicity by Racial/Ethnic Cohort from Screener (Unweighted Data)

Respondent's Self-Ide	entification	NORC-assigned Race/Ethnicity					
Racial/Ethnic Group ¹	Total	Non-Black Non-Hispanic	Non-Hispanic Black	Hispanic			
Total	12686	7510	3174	2002			
Black	3049	19	3017	13			
Total Hispanic	1834	46	5	1783			
Cuban	116	1	0	115			
Chicano	59	0	0	59			
Mexican	383	5	0	378			
Mexican-American	734	15	1	718			
Puerto Rican	328	7	1	320			
Other Hispanic	118	7	0	111			
Other Spanish	96	11	3	82			
Total European	5281	5100	82	99			
French	311	290	10	11			
German	1395	1376	5	14			
Greek	31	29	0	2			
English	1561	1476	51	34			
Irish	949	933	3	13			
Italian	497	474	7	16			
Polish	238	234	3	1			
Portuguese	97	88	3	6			
Russian	45	45	0	0			
Scottish	122	120	0	2			
Welsh	35	35	0	0			
Total Asian	117	93	11	13			
Asian Indian	22	20	2	0			
Chinese	26	22	4	0			
Filipino	43	33	4	6			
Japanese	19	14	0	5			
Korean	6	3	1	2			
Vietnamese	1	1	0	0			
Hawaiian/Pacific Islander	20	17	0	3			
American Indian	622	585	17	20			
Other	779	736	21	22			
American	743	692	10	41			
None ²	241	222	11	8			

¹ R00102., 'Racial/Ethnic Origin with Which R Identifies Most Closely,' is used unless it was not answered; otherwise R00096., '1st or Only Ethnic Origin' is used. Those listing only one ethnic background did not answer R00102.

Race and ethnicity variables for household members are based on information collected on the *Household Screener*; in which race and one ethnic background for each household member were recorded.

² Includes totals of 98 "don't know," 132 "none," 10 "invalid skips," and 1 "refusal."

Immigration: In 1990, NLSY79 respondents born outside the United States, its territories, or Puerto Rico were asked a series of questions on their immigration history and visa status. Dates of first and most recent entrance into the United States to live for six or more months and information on whether the respondent was the principal entrant/immigrant were collected. For respondents' or principal entrant/immigrants' first and most recent entry or change in visa/immigration status, details were gathered on (1) visa or immigration status at entry date; (2) form of temporary entry visa; (3) citizenship status (i.e., citizen or permanent resident alien) and relationship of the sponsoring relative; and (4) country of citizenship at entry date or date of change of status.

Also recorded for the respondent was information on (1) current citizenship/residence/visa status in the United States; (2) residence inside/outside the United States; (3) expectations to return to the United States to live permanently or to return to his/her country of birth to live permanently; and (4) the total number of years spent outside the United States since initial entry. Citizenship status at the time of the 1990 interview is depicted below (Table 4.33.2). Of related interest are the following variables, 'Is R a Citizen of the U.S.,' available from the 1984 interview (R12148.), and 'Current Residence in U.S.?,' created for the 1988 through 2000 survey years.

Table 4.33.2 Current Immigration/Naturalization Status: 1990 NLSY79 Respondents Born Outside the United States

Citizens	302
Born Abroad of U.S. Parents	78
Naturalized	224
Lawful Permanent Resident of the U.S.	248
Applicant for Naturalization or Legal Permanent Residence	70
For Naturalization	36
For Permanent Residence	34
Refugee/Asylee	2
On Temporary Visa	2
Living/Working in U.S. without Permission	8
Other	28

Note: Categories are not mutually exclusive.

Related Topics: 'Birthplace (Country and State) of R's Mother/Father' and 'Birthplace (Country) of Father's Father' are available in "Geocode 1979" (on the Geocode CD) areas of interest. For each household member, information is available from the screener on presence of a Spanish surname and whether Spanish was the language spoken in the home when that individual was a child. The 1979 interview asked whether a foreign language (Spanish, French, German, other) was spoken at home during the respondent's childhood. In addition, interviews record for each survey whether English, Spanish, or

another foreign language was used to administer the *Household Interview Forms* ('English or Foreign Language Used for Household Record') and questionnaire ('Int Remarks - Was Interview Conducted in English or Foreign Language').

Survey Instruments: Race and ethnicity variables originating from the screener are located on the second page of the *Household Screener*. Questions concerning the ethnicity of the respondent are included in the "Family Background" section (Section 1) of the 1979 questionnaire. Interviewer remarks regarding race are located in the final section ("Interviewer's Remarks") of each questionnaire. Immigration questions are located in Section 13, "Immigration," of the 1990 questionnaire.

Documentation: For further information on the coding of race and ethnicity in the *Household Screener*, see the 1978 Household Screener and Interviewer's Reference Manual (NORC 1978). Those needing additional information on coding procedures should request a copy of a NORC memo dated 10/4/78 available from NLS User Services.

Data Files: Race and ethnicity variables are included in the following areas of interest: 'Racial/Ethnic Cohort from Screener' is a "Common" variable. Ethnicity variables originating from the 1979 interview as well as all immigration variables have been placed in the "Family Background" area of interest. The interviewer's remarks variables are located in "Interviewer Remarks." Race variables for household members originating from the 1978 household screening are located in "Misc. 1979." 'Current Residence In U.S.?' is found in "Misc. xxxx."

Reference

NORC. 1978 Household Screener and Interviewer's Reference Manual. Chicago, IL: National Opinion Research Center - University of Chicago, 1978.

NLSY79 Children

All information on the race and ethnicity of the NLSY79 younger children is derived from the mother's data on the main youth files. 'Race of Child' is reconstructed from the youth data with the child as the unit of observation, i.e., each child born to a NLSY79 mother is assigned the mother's race ("black," "non-black/non-Hispanic," "Hispanic") from the NLSY79 1978 *Household Screener*. Table 4.33.3 gives the race/ethnicity breakdown for the NLSY79 children from 1988 through 2000. Race/ethnicity of the young adult children as well as race/ethnicity of their biological father is asked directly of the young adult children in their first Young Adult interview. They are also asked about ethnic origins and primary ethnic identification.

Related Topics: Variables entitled 'In What Language Was This Child Assessed' and 'What Language Was This Child Self-Administered Supplement' (English, Spanish, Other) are available from the 1988–2000 *Child Supplements*. These variables are located in "Child Supplement xxxx" for the corresponding years.

Documentation and Data Files: Child's race, based on mother's race/ethnicity, is included in the "Child Background" area of interest. Detailed race and ethnicity questions asked directly of the young adults are in the family background section of the questionnaire.

Table 4.33.3 NLSY79 Child Sample by Race/Ethnicity: 1986–2000 (Unweighted Data)

	1986	1988	1990	1992	1994	1996	1998	2000
Hispanic	937	1158	1304	1483	1546	1520	1550	1193
Black	1604	1895	1994	2133	2350	2330	2229	1914
Non-black, non-Hispanic	2430	3213	2505	2893	3193	3253	3288	3310
Total	4971	6266	5803	6509	7089	7103	7067	6417

4.34 School & Transcript Surveys

This section describes (1) the separately administered surveys that collected information from the high schools attended by respondents in the NLSY79 cohort and (2) the special transcript data collections that gathered, from the high school records of respondents, detailed information on courses taken and grades and credit received. Also discussed is the 1995 survey of schools attended by the NLSY79 Children.

NLSY79

NLSY79 High School Survey: A separate mail survey of the schools attended by civilian NLSY79 respondents was conducted during 1980. Schools eligible for survey were non-foreign schools attended by civilian respondents who had both been interviewed in 1979 and completed the 1979 "School and Record Information Release Form." A follow-up release form, the "Student Release/Locating Form," was administered by NORC Profiles of American Youth examiners during the summer of 1980; 2,200 forms were collected. Designed to supplement both subjective respondent information on educational experiences collected during the main surveys and the transcript data collections described below, the school survey gathered information on each school's total enrollment, type of grading system, number of books in the school library, vocational/technical course offerings, dropout rate, ethnic/racial composition of students and faculty, percent of economically disadvantaged students, characteristics/qualifications of the staff, and percentage average daily attendance.

Also collected was respondent-specific information for the school surveyed including month/year last enrolled; reason not enrolled; highest grade attended; and whether or not the respondent had participated in remedial English, remedial mathematics, English as a second language, or bilingual education classes. Scores from intelligence and aptitude tests administered to the youth during his/her schooling were also collected. Table 4.3.1 in the "Aptitude, Achievement & Intelligence Scores" section of this guide presents the names of the tests and the numbers of respondents for whom scores are available.

NLSY79 Transcript Surveys: During 1980–83, transcript information was collected for 8,778 civilian NLSY79 respondents who were 17 years of age or older and who were expected to complete high school within the United States. The types of information gathered for each of up to 64 courses included grade level at which the course was taken, a code for the high school course, the final or computed grade for that course, the source of the final grade, and the credits received. Rumberger and Daymont (1982) review the types of academic and vocational courses reported during the initial transcript fielding effort.

Additional information collected from each school for each surveyed respondent included number of days the respondent was absent from school in each of the high school grades attended, the respondent's rank in class for the last year attended, number of students in the respondent's class for the last year attended,

dates (month/year) last enrolled at this school, and reason left this school. Users should be aware that these data have high nonresponse rates. In some cases, individual items are only available for small numbers of youth.

Summary variables include the final transcript disposition status, the year in which these transcript data were collected, and an error flag for these transcript data. Scores (math and verbal) from standardized tests collected during this special survey are discussed in the "Aptitude, Achievement & Intelligence Scores" section of this guide. Table 4.34.1 depicts fielding periods, target samples, and the number of eligible respondents for each of the transcript fielding efforts.

Table 4.34.1 Transcript Data Collection, Rounds I–III: 1980–83 NLSY79

Round	Fielding Period	Target Sample	# of Eligible Respondents	# for Whom Transcript Data Collected 1
Round I	April – October 1980	Rs 17 years of age or older as of the 1979 interview	8420	5825
Round II	September– December 1981	Rs born in 1963, i.e., age 17 as of January 1981, plus Round I Rs with less than eight semesters coursework and still enrolled	2376	1927
Round III	September – December 1983	Rs born in 1964 plus Rs born before 1964 with less than eight semesters coursework supplied during Rounds I & II	1576	1258

¹ Some amount of information was collected for 8951 respondents.

User Notes: Although the survey of schools and the transcript data collections were conducted as a single fielding effort, the eligible universes were slightly different (NORC 1980). Transcript data are not available for the following NLSY79 respondents: (1) those considered out-of-scope either because they were members of the military sample (1280), because they were under age 17 (724) or because they were enrolled in foreign schools (175); (2) those for whom release forms were not available (378); and (3) 1,341 respondents for whom data are not available for some other reason.

Survey Instruments & Documentation: This information was collected using the "School Questionnaire" and the "Student's School Record Information" forms, copies of which appear in the NLSY High School Transcript Survey: Overview and Documentation. This document, a composite of the round-specific technical documentation prepared by NORC (1980, 1982, 1984), also provides background information on the administration of this survey, a discussion of data quality and consistency issues, a copy of the "Transcript Coding Sheet," and a listing of course codes.

Data Files: The 96 variables from the school survey are labeled as 1979 raw variables and can be found in the "School Survey" area of interest on the main data set. Transcript data from all years are labeled as

1981 created variables and can be found within the "Transcript Survey" area of interest. The absenteeism/rank/ enrollment information collected during the transcript survey is located in the "Misc. 1981" area of interest.

References

Borus, Michael E. "Education and the Schools Youth Attend." In *Pathways to the Future: A Longitudinal Study of Young Americans. Preliminary Report on the 1980 Survey.* Michael E. Borus, ed. Columbus, OH: CHRR, The Ohio State University, 1981.

Light, Audrey. "Notes on the NLS Schooling Data." Columbus, OH: CHRR, The Ohio State University, 1995.

National Center for Research in Vocational Education and Center for Human Resource Research. *NLSY High School Transcript Survey: Overview and Documentation*. Columbus, OH: CHRR, The Ohio State University.

NORC. "The School and Transcript Survey: Technical Report." Chicago: NORC, University of Chicago, 1980.

NORC. "Transcripts II: Technical Report." Chicago: NORC, University of Chicago, 1982.

NORC. "Transcripts III: Technical Report." Chicago: NORC, University of Chicago, 1984.

Rumberger, Russell and Daymont, Thomas N. "The Effects of High School Curriculum on Labor Market Success." In *Pathways to the Future, Volume II. A Final Report on the National Longitudinal Survey of Youth Labor Market Experience in 1980.* Michael E. Borus, ed. Columbus, OH: CHRR, The Ohio State University, 1982.

NLSY79 Children

In 1995 a separate child school survey was conducted for children born to female respondents of the NLSY79. The survey included data collection for about 2,900 children who were in grades one through twelve in either the 1993–94 or 1994–95 school years. This represents about 75 percent of the children eligible to be interviewed.

For every eligible child, an effort was made to complete several documents. The first was a questionnaire addressed to the school principal that solicited a variety of information about characteristics of the school and school policies. Second, the school central staff was asked to complete a questionnaire that focused on the individual youth's academic success, social adjustment, and involvement in a variety of school activities. This questionnaire also gathered selected characteristics and policies relevant to the grade level in which the youth was enrolled. In addition, the youth's transcript was obtained whenever possible.

Selected standardized testing information has been culled from these records for about 40 percent of sample. The data may be linked by ID with the NLSY79 1996 child data release. Interested researchers should contact NLS User Services for more information on obtaining these data.

4.35 School Discipline

NLSY79

The 1980 survey included several questions on school discipline problems, i.e., whether NLSY79 respondents had ever been suspended or expelled from school, and if so, the number of times, date of most recent disciplinary action, and when/if the youth had returned to school. Almost one quarter of the sample, or 3,030 respondents, reported having been suspended at some point in their schooling; a smaller number (538) reported having been expelled. The "Regular Schooling" sections of each questionnaire collect information on the reason why non-enrolled respondents, i.e., those who had been enrolled in school since the last interview but who had left school before the current interview, had left school. "Expelled or suspended" is a possible response to this question. Although a distinction cannot be made between expulsions and suspensions, a record of the dates that a respondent left school because of an expulsion/suspension and the dates that school was reentered can be constructed between survey years by linking information collected in these sections of the NLSY79 questionnaire.

Survey Instruments and Data Files: School discipline information is collected in Section 5, "On School Discipline," of the 1980 questionnaire and in the "Regular Schooling" sections of the questionnaires (Section 4 in 1979–81 and Section 3 in 1982–2000). The school discipline variables are located in the "Misc. 1980" area of interest. The school-related variables can be found in the "School" area of interest.

NLSY79 Children

The 1988–2000 surveys of NLSY79 children asked mothers of school aged children and school aged children a series of questions on their child's schooling including classroom activities and teaching styles. Additionally, information was collected on behavior problems evidenced by a child that resulted in either the parent's notification or disciplinary action. Questions include the following: if the child was not attending school at the time of the survey, was expulsion or suspension the reason; had the child's behavior at school ever required the parent to meet with a teacher or principal; had the child ever been suspended or expelled from school; and, if so, at what grade level did the first disciplinary action take place.

Survey Instruments and Data Files: The child-specific questions can be found in Section 5, "School & Family Background," of the 1988–98 Mother Supplements and in the Child Supplements for 2000. These child-specific variables for 1988–2000 are located in the "Mother Supplement xxxx" areas of interest on the compact disc for the corresponding years. Young adults are asked about gaps in schooling and reasons for gaps.

4.36 Sexual Activity & Contraception

NLSY79

Sexual Activity: In 1983, 1984, and 1985 NLSY79 respondents were asked about their sexual activity. Once the respondent answered the questions, he or she was not asked the series in subsequent surveys. Out of a total of 12,686 respondents, 310 did not answer any of the questions in these three years.

The first activity question asked respondents whether they had ever had sexual intercourse. This question was skipped if the respondent had previously reported either being a parent or being pregnant. Out of the 11,797 respondents, 889 or 7.5 percent stated that they had **never** had sexual intercourse. Researchers should note that the youngest respondents answered this question when they were 18. The validity of these items is evaluated in Mott (1985). These data should be used cautiously because inconsistencies in reports of first intercourse with subsequent fertility events can sometimes occur. Respondents who had ever engaged in sex were then asked at what age they first had intercourse. Table 4.36.1 includes frequencies broken down by race and gender, as well as a total for the whole cohort.

Table 4.36.1 Reported Age at which Respondents First Had Sex by Race and Gender

	Male				Female			Total	
Age	Hispanic	Black	NB/NH	Hispanic	Black	NB/NH	Number	Percent	Cum. %
<10	16	75	29	0	2	7	129	1.1	1.1
10	3	50	17	0	3	8	81	0.7	1.8
11	12	58	19	0	4	7	100	0.9	2.7
12	30	140	91	1	14	14	290	2.5	5.2
13	38	158	160	10	35	50	451	3.9	9.2
14	87	207	249	32	73	132	780	6.8	16.0
15	139	273	415	71	181	275	1354	11.8	27.8
16	178	276	742	125	313	584	2218	19.4	47.2
17	177	136	621	143	293	625	1995	17.4	64.6
18	117	90	527	145	282	711	1872	16.3	81.0
19	52	24	216	136	118	367	913	8.0	88.9
20	25	11	155	63	74	233	561	4.9	93.8
21	12	11	72	60	32	140	327	2.9	96.7
22	8	3	56	31	14	79	191	1.7	98.4
23	4	0	22	9	4	49	88	0.8	99.1
24	0	1	14	3	3	26	47	0.4	99.5
25	3	2	10	6	3	9	33	0.3	99.8
26	3	0	3	5	1	3	15	0.1	100
27	1	0	1	0	0	3	5	0.0	100
Total	905	1515	3419	840	1449	3322	11450	100	100

Note: Numbers are based on responses from the 1983, 1984, and 1985 NLSY79 surveys (R09880., R10207., R13122., R13796., R16916., and R17600.). Universe includes only respondents ever reporting sexual intercourse.

Questions in this section also ask NLSY79 respondents if they have had sex in the past month. In 1983, respondents provided a yes/no answer. However, in 1984 and 1985 they were asked the number of times they had sex in the last month. The data contain some outlying entries; users should carefully decide how to interpret outlying data points in these distributions. Additionally, there is evidence of a significant number of youth who changed their "ever had sex" status from yes to no between 1983 and subsequent survey years.

In 1984, the survey also asked if respondents had taken a sex education course. If so, they were asked at what date they took the course. Respondents also stated whether the first course they took covered:

- The female menstrual cycle
- Contraception methods
- Where to obtain contraception
- Effects of contraception
- Sexual diseases

To test reproductive knowledge, respondents were also asked when pregnancy is most likely to occur during the female monthly menstrual cycle. Answers in 1984 show a substantial portion of respondents did not choose the medically correct answer of about two weeks after the period. Approximately 25 percent of men and 12 percent of women stated they did not know the answer.

Table 4.36.2 Knowledge of When Pregnancy Most Likely to Occur

Answer	Males	Females
Right before Period	1283	1185
During Period	352	128
Right after Period	963	806
About 2 Weeks after Period	1441	2549
Anytime	496	597
Don't Know	1480	725

Source: The data are from the 1984 survey: males R13150. and females R13826.

Contraception: Since 1982, NLSY79 respondents have regularly been asked about their use of contraception. These contraception questions appear in the "Fertility" section of the questionnaire. The questions were asked annually from 1982 to 1986. After 1986 the questions were asked only in even years corresponding with the child supplements (i.e. 1988, 1990, 1992, etc.). After 1994, the surveys became biennial and the questions were included in each survey.

The standard sequence for these questions is to first show respondents a hand card listing a variety of birth control methods. The respondents are then asked if they use birth control. If they state that they do, the

second question asks the frequency of these methods using a three-point scale of "always," "sometimes," or "almost never." Finally, respondents are asked to state all the methods they have used in the past month from the following list:

- Pill
- Condom, rubber
- Foam
- Jelly or cream alone
- Suppository or insert
- Diaphragm with or without jelly or cream
- Douching after intercourse
- IUD, coil, loop

- Operation-Female sterilization, tubes tied
- Operation-Male sterilization, vasectomy
- Natural family planning, safe period by temperature of cervical mucus test
- Rhythm or safe period by calendar
- Withdrawal/pulling out
- Contraceptive sponge
- Other Method

Over time the list has been expanded and now includes three additional choices:

- Abstinence
- Norplant
- Cervical Cap

In most years, at the end of this three-question series, the interviewer fills in a question that states if anyone else was present during this part of the questioning. Small children under three years old are not counted by interviewers when filling in their response.

In addition to these questions, female respondents who are pregnant or who have given birth since the last child survey year are asked about their contraception methods before conceiving. Respondents are asked if before becoming pregnant they used one of the birth control methods listed, or if they stopped all birth control methods before becoming pregnant. Finally, they were asked if the reason they stopped using birth control was because they wanted to become pregnant.

Survey Instruments: The questions on sexual activity and contraception can be found in the "Fertility" section of each questionnaire. In 1983, the fertility section was fielded as a separate supplement for those respondents who were not interviewed in 1982.

Data Files: The variables described above can be found within the "Birth Record" and BIRTHXX areas of interest.

Reference

Mott, Frank L. "Evaluation of Fertility Data and Preliminary Analytical Results from the 1983 (Round 5) Survey of the National Longitudinal Surveys of Work Experience of Youth." Columbus, OH: CHRR, The Ohio State University, 1985.

NLSY79 Children

NLSY79 Children have been asked about sexual intercourse but not contraception since 1988. Each child over age ten is asked to fill in a booklet called the *Child Self-Administered Supplement (CSAS)*. If the child is 13 years or older, an extra sheet of paper is inserted into the *CSAS* that asks about sexual intercourse.

The confidential CSAS card for 1988–2000 asked child respondents if they "ever had sexual intercourse? 'had sex', 'made it', etc." If they answered "yes," respondents were asked to fill in their age in years the first time they had sex and the date of this experience. Since 1992, an expanded confidential CSAS has asked the respondent if they ever had any children. If they answered "yes," the booklet then probed for additional information about these grandchildren of NLSY79 respondents.

NLSY79 young adults, those 15 and older, have been asked about both sex and birth control methods in the confidential section of each survey. Young adults are first asked if they have ever had sexual intercourse. If the answer is "yes," the respondent reports the number of partners, age when he or she first had sex, and how long ago he or she last had sex. Respondents are also asked if they used birth control the last time they had sex. If they had used birth control they stated the type used. Since 1998, questions have been asked about the relationship, age, and cohabitation status of the most recent sexual partner.

Female young adults who have had sex are asked if they have ever become pregnant and the type of birth control used when they became pregnant. Finally, questions in 1994 and 1996 were asked to female respondents who had terminated a pregnancy about the number of abortions they had and the age at which they occurred.

Survey Instruments: For all years, the sexual activity questions are located in the *Child Self-Administered Supplement* confidential card and the "YA Self" area of interest or in the YASRB for 1994, 1996, and 1998 and the CAPI self-report section for 2000.

4.37 Time & Tenure with Employers

NLSY79

This section reviews the types of variables present within the NLSY79 main data files that provide information on (1) time spent with an employer measured in terms of the number of hours worked, the type of shift or actual clock hours, the specific dates that employment began and ended, and total tenure in weeks; (2) time spent away from an employer during which the employment contract was maintained or renewed, commonly called a within-job gap; and (3) periods of time when the respondent was neither working for an employer nor serving in the active forces. Time spent away from any employer, commonly called a between-job gap, is measured in units of one week or more.

User Notes: Understanding the NLSY79 time and tenure variables requires some knowledge of the NLSY79 employer and labor force status data collections. Readers will find more information on those subjects within the "Jobs & Employers" and the "Labor Force Status" sections of this guide.

Hours Worked: During each survey, information is collected on (1) the number of hours during the survey week that a respondent worked at all jobs; (2) the number of hours per day and week usually worked at the CPS job; and (3) the usual hours per day and per week worked at the non-CPS Jobs #1–5. Post-1987 surveys differentiated, for each job, the number of hours worked at home from the hours worked at the place of employment. Follow-up questions double check that these at-home hours are included in the total hours reported working. The creation procedures for the 'Hourly Rate of Pay' variables factor in all values. Two summary variables are created for each year that provide information on the total number of hours that a respondent worked: 'Number of Hours Worked Since Last Interview' and 'Number of Hours Worked Past Calendar Year.'

Survey Instruments & Documentation: The "Current Labor Force Status (CPS)" and Employer Supplement sections of the main questionnaires and the 1980 through current survey year Employer Supplements collect information on hours. The hourly summary variables are created from the week-by-week arrays produced by the NLSY79 Work History program.

Data Files: Information collected on hours worked both at all jobs and at the CPS job has been placed in the CPS area of interest, while information related to Jobs #1–5 is located in "Job Information." The series of summary variables is in "Key Variables." Since 1993, Job #1 is always the CPS job if there is one.

Shift & Times Worked: Data on the type of shift usually worked at the respondent's current or most recent (CPS) job, e.g., "day shift," "evening shift," "split shift," etc., have been collected during all but the 1986 and 1987 surveys. Beginning with the 1986 survey, information on the actual times (24 hour clock)

that a respondent usually began and ended the CPS job is available. Coding categories for the 1988 and 1989 shift variables were collapsed into "same or fixed shift" and "shift rotates." All respondents were asked a follow-up question beginning in 1990 on the actual or usual time work began and ended during the last week (or most recent week) they worked.

Survey Instruments: The "Current Labor Force Status (CPS)" section of the main questionnaires gathered information on shift and clock hours worked until 1994 for CPS job. From 1994 on, this information is gathered in the *Employer Supplements* for all jobs.

Data Files: The NLSY79 shift variables can be found in the "CPS," "Job Information," and "Misc. xxxx" areas of interest. The post-1985 clock variables are in "Misc. xxxx" and "Job Information."

Periods Working for an Employer Including Unpaid & Paid Leave: Periods of time that a respondent worked for a specific employer can be identified via information collected on start and stop dates, i.e., the day, month, and year that employment began and ended. Those respondents with a stop date for an employer are asked for information on the reason the job ended and whether or not a new job was lined up before the respondent left this job. Interrupted employment with an employer of one week or more during which the respondent was either on unpaid leave or unpaid vacation is also detailed. The total number of such separate within-job gaps is identified, along with the specific start/stop dates and the main reason for not working, e.g., "on strike," "on layoff," "quit job but returned to same employer," "job ended but began again," "attending school," "health problems," "child care problems," "pregnancy," etc.

Active job search by the respondent during a period of not working, e.g., whether the respondent was looking for work during "some," "none," or "all" weeks, is specified. For those respondents who indicate that "some" weeks of a non-working period were spent looking for work or on layoff, information is available on the number of weeks duration for each period of unemployment or layoff, the total number of weeks spent looking and not looking, and the main reason s/he was not looking for work. Users should note that the specific week numbers during which the respondent was unemployed versus out of the labor force within a single gap are not available if both statuses apply. Information is collected only on the total number of weeks that were spent in either of the two non-employed labor force states. For example, an eight week within-job gap that occurred between week number 152 and week number 160 may identify two of those weeks as weeks of unemployment and six of those weeks as out of the labor force, based upon responses given. It will not designate the specific week numbers 154 and 155 as the precise two weeks that the respondent was unemployed as opposed to out of the labor force.

During post-1987 surveys, female respondents (only) are asked for information on the total number of separate periods of paid leave from an employer which were taken due to either pregnancy or birth of a child. Start and stop dates are collected for each period of leave.

Types of information collected about periods of paid and unpaid leave are summarized in Table 4.37.1.

Table 4.37.1 Gaps in Employment: NLSY79 Main Files

		Type of Employment Gap	
Type of Information	Paid Leave ¹	Within Job Gap	Between Job Gap
Description	Paid leave for periods due to pregnancy or birth of a child	Periods of one week or more of unpaid leave or unpaid vacation during which R did not work but the association with an employer was maintained or renewed	Periods of time during which there was no association with any employer or active military duty
Number of Periods ²	Up to two periods of one full week or more	Up to three periods of one full week or more	Up to four periods of one full week or more
Start Date	Month/ Day/Year	Month/ Day/Year	
Stop Date	Month/ Day/Year	Month/ Day/Year	
Main Reason for Not Working	Pregnancy or childbirth (unspecified)	On strike, on layoff, quit job but returned to same employer, job ended-restarted, attending school, health problems, child care problems, pregnancy, etc.	Coding categories for reason not working vary by both type of job gap and survey year for the between-job gap data collections
Amount of Weeks Looking or on Layoff	na	Some/None/All	
Week Numbers (Rs Looking for Work/on Layoff)	na	Week number period began Week number period ended	
Number of Weeks Looking or on Layoff	na	Total Weeks	
Number of Weeks Out of the Labor Force	na	Total Weeks	
Reason Out of the Labor Force	na	Did not want to work, ill/disabled, pregnar labor dispute/strike, could not find work, in	

Pregnancy/childbirth leave information is available beginning in 1988.

Survey Instruments: Each Employer Supplement includes questions on periods working and not working for that employer. The Jobs Calendar, used during administration of the military- and job-related sections of the main questionnaire, and the Employer Supplement, function to (1) provide a graphic summary of a respondent's military and employment history since the date of last interview and (2) identify the duration of gaps between periods of labor force activity. Each calendar gives the interviewer the week numbers attached to the last few calendar years; weeks are numbered consecutively beginning in January 1978 (week 01) through December of the current survey year (e.g., week 758).

Although information is collected about all periods of nonemployment, data on the main file public release is currently restricted to the numbers specified here. The Work History CD may contain additional periods.

Data Files: Variables related to periods working for an employer have been placed in the "Misc. xxxx" and "Job Information" areas of interest. Those variables related to employment gaps are located in "Periods Not Working within Job Tenure" and can be identified through variable titles that include the phrases PERIOD #, JOB #, and, for many variables, the NOT EMPLD universe.

User Notes: The collection of job-specific start and stop dates and gaps in the work record that are linked to specific week numbers allows a chronological weekly work history from 1978 to current survey date to be constructed for each respondent. This weekly chronicling of a respondent's work experience is released on the NLSY79 Work History Data; this data are arranged in arrays, i.e., a weekly labor force status array, a weekly usual hours worked array, and a weekly dual jobs array, etc. Users are cautioned that the week numbers associated with the various periods of unpaid leave may be assigned imprecisely if the gap is split between an unemployment and out of the labor force classification. In this case unemployment is arbitrarily assigned to middle weeks.

Related Variables: Assignment of a specific labor force status to each week in the respondent's work history permits creation of a series of "summary labor force variables." These variables provide a count of the total number of weeks a respondent spent in a given labor force state calculated for two different periods of time, i.e., the past calendar year and since the last interview. Because these variables, e.g., 'Number of Weeks Out of Labor Force in Past Calendar Year,' 'Number of Weeks Unemployed Since Last Interview,' etc., summarize time spent in a given labor force state, they are discussed in the "Labor Force Status" section of this guide.

Two other sets of summary variables in which time with a given employer is delineated include (1) 'Total Tenure (in Weeks) with Employer as of Interview Date Job #X'; and (2) 'Number of Different Jobs Ever Reported as of Interview Date.' A description of the tenure variable follows; creation procedures for the jobs ever reported can be found in the "Jobs & Employers" section of this guide.

Total Tenure with Employer: The variable series 'Total Tenure (in Weeks) with Employer as of Interview Date Job #X' is created from (1) the start (or last interview) and stop dates for an employer; and (2) a match, if any, of employers identified during the current interview as the same employer from a previous interview year. Tenure in weeks with an employer is first calculated for the period between the date of last interview and the current interview date (tenure since the date of last interview). Next, a match with employers reported during the previous interview is attempted. If such a match is established, the total tenure in weeks with the matched employer from the previous interview is added to the total weeks tenure with that employer since the date of last interview. This creates a cumulative tenure in weeks with that employer from the time the employer was first reported up to the current interview date.

Tenure with employers for whom no match exists in the previous interview is simply the tenure with that employer since the date of last interview. Further information on matching employers can be found in "Appendix 9: Linking Employers through Survey Years," included in the *NLSY79 Codebook Supplement* and as part of the NLSY79 Work History compact disc documentation.

Data Files & Documentation: The tenure variables are located in the "Job Information" area of interest. One tenure variable exists for each of five jobs in each survey year. The topical "Work Experience" section of this guide includes a discussion of these variables.

Periods Not Working or in the Military: During each survey, information is collected on up to six periods since the date of last interview during which a respondent is not affiliated with an employer or in the active forces. Data available for each period of not working include month, day, and year that the period began and ended; the specific week numbers associated with the non-work period; whether any of these non-working weeks (coded as "none," "some," or "all") was spent looking for work or on layoff; and, if some were, the number of weeks spent looking for work or on layoff, the number of weeks the respondent was out of the labor force, and the main reason that the respondent was not looking for work. All respondents with between-job gaps are routed through the periods of no work questions.

Survey Instruments: The periods not working questions can be found in the "Gaps when R was not Working or in the Military" or "Gaps" sections of the main questionnaires.

Data Files: The "Misc. xxxx" and "Between Jobs Gaps" areas of interest contain the gaps between jobs variables.

NLSY79 Children

In each survey, information has been collected from the children aged 15 and older, the young adults, on the start and stop dates of employment, the number of hours worked, and the type of shift worked, as well as within-job gaps and between-job gaps for all jobs held since January 1 of the year preceding this fielding. The questions asked closely parallel those in the main youth survey. An extensive collection of more than 400 variables related to mother's tenure is available on the 1996 Child CD-ROM. These variables are all classified under the "Work History" area of interest and provide longitudinal information on the mother's work history over the child's life. Beginning in 2000, young adults were not asked for between job gaps and only limited information was collected concerning job gaps over time.

Survey Instruments: The questions described above can be found within the Employer Supplement sections of the NLSY79 Young Adult Questionnaires.

4.38 Training

Overview: This section reviews the core data collections and year-by-year variations present within the NLSY79 training sections. Descriptive tables present the number of respondents participating in various types of training programs by survey year. Summary variable tables for the NLSY79 provide details on the types of training programs and training providers about which data have been collected across surveys.

This section describes the types of information collected within the "Training/Other Training" sections of the NLSY79 questionnaire. Users should keep in mind that these data provide only a partial picture of the entire training investments of an individual. A fundamental concern of the Employment and Training Administration of the U.S. Department of Labor, which funded the 1979–86 rounds of the NLSY79, was the efficacy of various federally funded employment and training programs in helping youths to acquire skills and secure employment. The 1979–86 "Other Training" sections of the questionnaire supplemented data collected in three other core question series: (1) "On Jobs," which gathered detailed information on government jobs and associated training; (2) "Government Training," which highlights other opportunities in which respondents participated over and above those reported in the "On Jobs" section; and (3) "Military," in which data on formal and on-the-job training for military jobs were collected. In 1987, when funding of the NLS shifted to the Department of Labor's Bureau of Labor Statistics, the collection of extensive information on government jobs and training information ceased and the "Other Training" section of the questionnaire was restructured.

In addition to these regularly fielded series, special data collections that focused on high school courses, degrees and certifications, and time use provide supplementary information on NLSY79 respondents' training investments. The "Government Training & Jobs Programs," "Educational Attainment & School Enrollment," and "School & Transcript Surveys" sections of this guide review some of these additional variables.

Core Data Collection: In general, the "Training" and/or "Other Training" sections of each NLSY79 questionnaire (1) collect information on each respondent's participation since the date of the last interview in three (or more) training programs and (2) confirm and update information on two (or more) training programs in which s/he was enrolled on the date of last interview. For each program, a core set of variables is collected on the type of provider offering the training, start and stop dates (i.e., month and year), whether the training was completed, and the number of hours per week usually spent in each training program (Table 4.38.1).

Table 4.38.1 Core Data Collection: NLSY79 Training 1979–86 and 1988–2000

'Any Vocational/Technical Training Enrolled' 'Attended Vocational/Technical Program or On-the-Job Training'
'Type of School or Vocational/Technical Program Enrolled In'
'Month/Year Began' 'Month/Year Completed/Left'
'Completed Vocational/Technical Program Enrolled In'
'Hours Per Week Spent at Vocational/Technical Program Taken'

Note that the 1979–86 data collections asked only about training programs in which the respondent had been enrolled for more than one month.

Below is a discussion of the variations present in the regular fieldings of the "Other Training" and/or "Training" sections of the 1979–2000 questionnaires, followed by an overview of types of training providers and the primary types of training about which data have been collected within the following five sections of the NLSY79 questionnaire: "Other Training," "Training," "Jobs," "Government Training," and "Military."

Year-by-Year Variations: During the 1979–86 surveys, the focus of the NLSY79 training data collection was on the types of formal training programs in which a respondent was enrolled other than those already reported in the previously administered jobs, government training, military, and regular schooling sections of the questionnaire. After 1987, the series of questions dealing specifically with government-sponsored training was no longer fielded and the "Other Training" section was renamed "Training." The types of information collected for the 1979–86 and 1988–2000 survey years differ; each is discussed separately below.

Data collection during the 1979–86 interviews was limited to only those training programs in which the respondent had been enrolled for one month or more. Specific information on the occupation for which the respondent was being trained was also gathered in these years. In addition to the core sets of variables described above, the 1979 questionnaire included the following sets of questions: (1) retrospective questions on up to three training programs in which the respondent had participated before 1978 and on up to four other types of training in which s/he had ever participated and (2) information on the activities of the respondent during the summer of 1978, e.g., worked at a regular job, at an odd job, was on vacation, participated in a training program, or was enrolled in regular school. Included within the 1979 and 1980 training sections was a series of questions on the types of degrees and/or certifications that the respondent had ever received or received since the last interview. Age restrictions during the 1979 and 1980 interviews limited the administration of these other training questions to respondents who were 16 years of age and older. The supplemental 1981 "Time Use - Time Spent in Other Training" section

gathered, from those who had been enrolled during the past seven days in a training program, information on the type of training provider and the hours spent at the training school.

The 1982–84 questionnaires included an expanded series detailing (1) the firm specificity of each training program, i.e., whether a respondent had enrolled in a given occupational training in order to qualify for a specific job at a specific firm; (2) the involvement, if any, of the respondent's employer in encouraging or requiring the training and whether the training took place during regular work hours; (3) the source of money to pay for the training, e.g., employer, self, friends, government, or bank, with a distinction made between outright grants and loans; (4) the relationship to the respondent of those persons who encouraged enrollment in the training, e.g., friend, relative, employer (former or prospective), job counselor, teacher, etc.; and (5) the primary reason the respondent enrolled in the specific occupational training program, e.g., jobs are plentiful, pay is high, program sounded interesting, or [the training] related to the job at the time.

Because the 1987 survey was conducted mainly by telephone, the interview was abbreviated and only one question was asked about training. In this survey, respondents simply reported whether any training or assistance had been received from any government-sponsored program.

The 1988–92 series dropped the one month training duration limitation, the question that specified the job or occupation for which the respondent was being trained, and some of the provider types, e.g., barber/beauty school, flight school, and nurses program, that had been coding categories since 1979. The 1988 reference period was the last two years; other surveys referred to only the period since last interview. Company training programs run by the employer were differentiated from those conducted at the work place by someone other than the employer and those that took place outside of work. The number of training programs for which data were released was expanded to four. New questions included who paid for or sponsored each training program, whether the training was used on the respondent's current/most recent job, whether the training resulted in the respondent getting a different job, and the type of training that had been provided, e.g., skilled classroom training, basic/remedial skill training, on-the-job training, work experience, etc. Definitions of each training type and of some of the providers offering such training, drawn from the 1991 NLSY79 Question by Question Specifications, are listed in Table 4.38.2. Table 4.38.3 presents, by survey year, gender, and race/ethnicity, the number of respondents enrolled in the six types of training programs for which data were collected during the 1988–93 interviews.

Beginning in 1990, two questions were added on the relationship of each training program to the respondent's promotion possibilities, i.e., was the training necessary to get a promotion and did it assist the respondent in obtaining a promotion. Information was collected beginning in 1991 on the primary reason the respondent enrolled in the training program (this question had been taken out after 1984 but

was returned to the survey in 1991), the specific employer who sponsored the training, and whether a guaranteed student loan was used to pay for the training.

Table 4.38.2 Training & Training Providers: Definitions from the NLSY79 *Question-by-Question Specifications* (1991)

Apprenticeship Program: A formal program in which a person agrees to work in return for wages and training in a skilled trade or art for a prescribed period of time.

Business School: Is not to be confused with business classes in college or graduate school. It does not contribute to an undergraduate or professional degree.

Classroom Training - Basic Skill: Includes academic instruction in a classroom setting leading to specific certification for a GED or academic instruction in basic education such as English or math. See description of GED below.

Classroom Training - Job Skill: Includes vocational instruction in a classroom setting, designed to teach work tasks of a particular job group, for example, auto mechanics, health services, clerical training, etc.

Correspondence Course: Training courses offered through the mail.

General Educational Development Test (GED): A certificate that is equivalent to a high school diploma obtained as a result of taking the General Educational Development Test. The test provides a valid means of measuring the educational proficiency of individuals taking the test in comparison with high school graduates.

On-the-Job Training: Includes institutional instruction in a work setting intended to enable an individual to learn a skill and/or qualify for a particular occupation through demonstration and practice.

Vocational Rehabilitation Center: Facility offering specialized training to prepare disabled persons to enter or re-enter the work force.

Vocational Technical Institute: For example, a beauty school, auto mechanics training, welder's school, etc.

Work Experience: Includes short-term or part-time work with employing agency to enhance employment ability of an individual through development of good work habits and basic work skills.

Note: Descriptions of service providers and training types specific to federally funded employment and training programs can be found in the 1979–91 *Question-by-Question Specifications*. Users should note that, to some extent, these types of training and training providers are respondent-defined.

Table 4.38.3 Number of Respondents Participating in Training by Survey Year, Type of Training, Gender, and Race/Ethnicity: NLSY79 1988–94

	Basic Sk	ill Classroon	n Training	Job Ski	II Classroom	Training	On-	-the-Job Trai	ning
Year	Total	Male	Female	Total	Male	Female	Total	Male	Female
				All Re	spondents				
1988	338	170	168	1374	741	633	538	302	236
1989	255	128	127	1016	540	476	446	246	200
1990	66	30	36	1066	548	518	437	237	200
1991	39	15	24	863	453	410	311	183	128
1992	46	21	25	853	421	432	283	154	129
1993	40	19	21	1000	495	505	294	143	151
1994	57	21	36	956	464	492	268	129	139
			Non	-Black/Non-H	lispanic Resp	oondents			
1988	181	96	85	824	459	365	314	169	145
1989	133	72	61	612	341	271	251	138	113
1990	32	16	16	643	325	318	237	118	119
1991	18	7	11	514	275	239	149	93	56
1992	17	11	6	478	251	227	134	77	57
1993	17	8	9	586	296	290	128	62	66
1994	24	10	14	524	269	255	128	68	60
				Black R	espondents				
1988	110	49	61	355	166	189	147	87	60
1989	86	39	47	263	131	132	136	73	63
1990	18	5	13	260	132	128	122	75	47
1991	10	2	8	213	110	103	100	53	47
1992	18	8	10	215	100	115	89	44	45
1993	17	7	10	256	124	132	101	45	56
1994	26	9	17	262	124	138	94	44	50
				Hispanic	Respondent	S			
1988	47	25	22	195	116	79	77	46	31
1989	36	17	19	141	68	73	59	35	24
1990	16	9	7	163	91	72	78	44	34
1991	11	6	5	136	68	68	62	37	25
1992	11	2	9	160	70	90	60	33	27
1993	6	4	2	158	75	83	65	36	29
1994	7	2	5	170	71	99	46	17	29

Table 4.38.3 Number of Respondents Participating in Training by Survey Year, Type of Training, Gender, and Race/Ethnicity: NLSY79 1988–94 (continued)

	Job	Search Assis	tance	W	ork Experien	ice		Other Trainin	g
Year	Total	Male	Female	Total	Male	Female	Total	Male	Female
				All Re	spondents				
1988	103	47	56	189	113	76	287	172	115
1989	48	20	28	146	81	65	195	113	82
1990	26	8	18	83	44	39	168	93	75
1991	20	3	17	70	46	24	126	70	56
1992	22	12	10	73	45	28	151	77	74
1993	30	13	17	70	33	37	150	73	77
1994	29	9	20	82	45	37	113	44	69
				-Black/Non-H	ispanic Resp	ondents			
1988	50	32	18	109	65	44	179	108	71
1989	13	6	7	82	44	38	120	70	50
1990	12	4	8	46	20	26	108	60	48
1991	9	2	7	34	24	10	78	41	37
1992	11	6	5	36	23	13	89	51	38
1993	8	5	3	32	14	18	91	46	45
1994	11	3	8	39	26	13	63	19	44
				Black R	espondents				
1988	39	10	29	47	29	18	59	37	22
1989	28	12	16	47	29	18	40	20	20
1990	8	2	6	21	13	8	33	21	12
1991	9	1	8	16	10	6	26	18	8
1992	9	6	3	16	9	7	31	15	16
1993	15	6	9	18	11	7	35	20	15
1994	10	2	8	20	13	7	28	15	13
				· · · · · · · · · · · · · · · · · · ·	Respondents				
1988	14	5	9	33	19	14	49	27	22
1989	7	2	5	17	8	9	35	23	12
1990	6	2	4	16	11	5	27	12	15
1991	2	0	2	20	12	8	22	11	11
1992	2	0	2	21	13	8	31	11	20
1993	7	2	5	20	8	12	24	7	17
1994	8	4	4	23	6	17	22	10	12

The 1993 series of training questions included the collection of information on (1) up to six training programs in which the respondent was enrolled since last interview and (2) up to four in which he or she was participating as of the last interview date. For those respondents who were enrolled at either point in time in a training program sponsored by an employer, a new question elicited information on whether the respondent had to be working for that employer for a period of time before training was made available.

Those enrolled in any training program were asked a series of (1) skill transferability questions, i.e., the amount of skills learned in each training program that the respondent thought would be useful in doing a

different kind of work for the (same) employer or in doing the same kind of work for a different employer and (2) high school course relevancy questions, i.e., whether the skills learned in this training program added to those acquired in high school courses in which the respondent had enrolled and, for those who did not take such high school courses, how much of what was learned in the training program could have been learned in high school.

In addition to this expanded set of questions on formal training experiences of NLSY79 respondents, the 1993 survey collected, for the first time, information on informal training opportunities. Those respondents with a current (or most recent) civilian job were asked a series of questions designed to tap the methods used to either learn their job and/or to upgrade skills required on that job.

Those respondents with a CPS employer who had implemented workplace changes in the past 12 months that necessitated the learning of new job skills were asked for information on (1) the type(s) of changes, e.g., a new product/service/equipment was introduced; an upgrade of employee's basic skills or computer skills was needed; employer policies regarding safety, compensation, or benefits were changed; etc.; (2) whether the training was acquired from (not already reported) classes/seminars, supervisors, coworkers, self-study, or some other means reported by the respondent; and (3) for each training mode, the number of weeks and hours per week spent in such training and the degree to which respondents thought skills learned in each program would be useful in doing a different kind of work for the (same) employer or in doing the same kind of work for a different employer. Respondents with a CPS employer who reported that they were not able to perform 100 percent of their current job duties at the time they first started doing the job were asked the same set of training and skill transferability questions listed above. Loewenstein and Spletzer (1994) review training questions in the 1993 NLSY79 and other data sets, including the 1991 CPS, the 1986 NLS of the High School Class of '72, and the Employment Opportunity Pilot Project, and present some initial findings from the 1993 NLSY79.

Types of Training Providers: Information has been collected during all survey years on the type of organization providing the training in which NLSY79 respondents participated. Provider types for which data have been consistently gathered across survey years include company training, business school, vocational/technical institute, and apprenticeship program. Questions fielded during select survey years specified other training providers such as nurses program, barber/beauty school, flight school, seminars or training programs at work/outside of work, and vocational rehabilitation center. Table 4.38.4 lists those types of training providers that appear as coding categories in the 1979–93 "Other Training/Training" sections of the questionnaire. Users should note that names of identical and additional agencies can be found in (1) the 1979–87 government training and jobs programs questions; (2) the 1979 degrees and

certifications data collection; and (3) the 1980 time use in "other training" series. Table 4.38.5 presents, by survey and gender, the number of respondents attending programs offered by these training providers.

Table 4.38.4 Types of Training Providers Identified in the "Other Training" & "Training" Sections of the NLSY79 Questionnaire: 1979–2000

Type of Training Provider	Survey Years
Apprenticeship Program	1979–86, 1988–2000
Barber or Beauty School	1979–86
Business College/School	1979–86, 1988–2000
Company Training Program	1979–86
Company Training (Formal) - run by an employer or military training (excluding basic training)	1988–2000
Correspondence Course	1979–86, 1988–2000
Flight School	1979–82
Nurses Program	1979–86
Seminars or Training Programs - at work run by someone other than employer	1988–2000
Seminars or Training Programs - outside of work	1988–2000
Vocational or Technical Institute	1979–86, 1988–2000
Vocational Rehabilitation Center	1988–2000

Note: Excludes similar and other providers specified in the 1979–86 "Government Training," the 1979 "Degrees and Certifications," and 1980 "Time Use" sections of the NLSY79 questionnaires.

Table 4.38.5 Number of Respondents Participating in Training Programs by Survey Year, Type of Program, and Gender: NLSY79 1979–2000

	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Survey Year/ Reference Period ²		ed One ong Progr			cational nical Ins	-	Comp	oany Trai	ining		rentices Program	
Before 1/1/78	587	285	302	295	157	138	91	53	38	47	39	8
Since 1/1/78	1004	494	510	383	213	170	108	69	39	47	38	9
1980	1142	566	576	319	190	129	114	65	49	37	29	8
1981	1074	542	532	278	187	91	108	66	42	33	26	7
1982	1167	581	586	309	159	150	122	72	50	43	34	9
1983	1191	633	558	266	150	116	159	87	72	24	21	3
1984	1141	569	572	191	110	81	180	93	87	26	20	6
1985	1010	506	504	177	100	77	126	64	62	32	23	9
1986	1101	590	511	193	100	93	189	134	55	30	26	4
Since 1986/Prior Int.	1989	1049	940	335	156	179	714	432	282	74	62	12
1989	1551	815	736	140	71	69	587	341	246	83	53	30
1990	1542	800	742	168	72	96	645	368	277	38	30	8
1991	1192	626	566	104	56	48	480	285	195	22	16	6
1992	1209	614	595	117	54	63	468	258	210	17	14	3
1993	1365	656	709	111	47	64	543	286	257	17	10	7
1994	1267	605	662	120	62	58	501	260	241	19	13	6
1996	1582	773	809	126	61	65	603	304	299	20	19	1
1998	1475	721	754	117	47	69	542	288	254	13	9	4
2000	1434	685	749	109	60	49	570	276	294	3	3	_

Table 4.38.5 Number of Respondents Participating in Training Programs by Survey Year, Type of Program, and Gender: NLSY79 1979–2000 (continued)

	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Survey Year/ Reference Period ²	Co	Busines llege/Scl		Cor	respond Course		Barl	per or Be School	auty	Nur	ses Prog	ıram
Before 1/1/78	47	9	38	27	14	13	35	3	32	47	6	41
Since 1/1/78	69	10	59	60	36	24	42	8	34	57	6	51
1980	89	18	71	76	46	30	30	3	27	47	1	46
1981	70	11	59	66	29	37	33	2	31	49	6	43
1982	66	13	53	87	55	32	33	4	29	49	3	46
1983	75	24	51	123	74	49	26	6	20	32	4	28
1984	50	15	35	87	48	39	21	4	17	37	5	32
1985	67	16	51	53	36	17	20	4	16	32	3	29
1986	75	26	49	67	38	29	34	6	28	20	2	18
Since 1986/Prior Int.	142	59	83	79	44	35	_	_	_	_	_	_
1989	61	19	42	145	84	61	_	_	_	_	_	_
1990	52	11	41	32	19	13	_	_	_	_	_	_
1991	27	5	22	33	20	13	_	_	_	_	_	_
1992	33	12	21	37	15	12	_	_	_	_	_	_
1993	26	8	18	30	22	8	_	_	_	_	_	_
1994	20	10	10	28	17	11	_	_	_	_	_	_
1996	31	13	18	22	10	12	_	_	_	_	_	_
1998	27	10	17	36	23	13	_	_	_	_	_	_
2000	22	13	9	07	0	19						
2000		13	9	27	8	19	_	_	_	_		_
2000				Sem	inars/Tra	ining		inars/Tra			/ocation	al
	FI	light Sch	ool	Sem		ining		inars/Tra			/ocation	al
Before 1/1/78	16	light Sch	ool 2	Sem	inars/Tra	ining						al
Before 1/1/78 Since 1/1/78	16 20	light Sch 14 17	2 3	Sem	inars/Tra	ining						al
Before 1/1/78 Since 1/1/78 1980	16 20 9	14 17 8	2 3 1	Sem	inars/Tra	ining						al
Before 1/1/78 Since 1/1/78 1980 1981	16 20 9 11	14 17 8 9	2 3 1 2	Sem	inars/Tra	ining						al
Before 1/1/78 Since 1/1/78 1980 1981 1982	16 20 9 11 12	14 17 8 9 10	2 3 1 2 2	Sem	inars/Tra	ining						al
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983	16 20 9 11 12 8	14 17 8 9 10 7	2 3 1 2 2 1	Sem	inars/Tra	ining						al
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984	16 20 9 11 12	14 17 8 9 10 7	2 3 1 2 2 1 0	Sem	inars/Tra	ining						al
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985	16 20 9 11 12 8 10 7	14 17 8 9 10 7	2 3 1 2 2 1 0 2	Sem	inars/Tra	ining						al
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986	16 20 9 11 12 8 10	14 17 8 9 10 7	2 3 1 2 2 1 0	Sem Prog	inars/Tra rams at — — — — — — —	ining	Prograi	ms outsi	Head	Rehab		al Center — — — — — — — — — — — — — — — — — — —
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int.	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2	Sem Prog	inars/Tra rams at — — — — — — — — — —	ining						Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2	Sem Prog	inars/Tra irams at ————————————————————————————————————	work — — — — — — — — — — — — — — — — — — —	Program	ms outsi	Columbia	Rehab	Dilitation	al Center — — — — — — — — — — — — — — — — — — —
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2 1	Sem Prog	inars/Tra rams at 	work — — — — — — — — — — — — — — — — — — —	Program	ms outsing	Columbia	Rehab		Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2 1	Sem Prog	inars/Tra irams at ————————————————————————————————————	work — — — — — — — — — — — — — — — — — — —	Program		Head	Rehab 33 24	Dilitation	Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2 1 —	Sem Prog	inars/Tra irams at ————————————————————————————————————	work — — — — — — — — — — — — — — — — — — —	Program			Rehab	Collitation	Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991 1992 1993	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2 1 —	Sem Prog	inars/Tra rams at 	work — — — — — — — — — — — — — — — — — — —	Program		Head	Rehab	Dilitation	Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2 1 —	Sem Prog	inars/Tra irams at ————————————————————————————————————	work — — — — — — — — — — — — — — — — — — —	Program			Rehab	Collitation	Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991 1992 1993	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2 1 —	Sem Prog	inars/Tra irams at	work — — — — — — — — — — — — — — — — — — —	Program	ms outsing	Head of the second se	Rehable — — — — — — — — — — — — — — 333 — 24 — 24	Collitation	Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991 1992 1993 1994	16 20 9 11 12 8 10 7	14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2 1 —	Sem Prog	inars/Tra irams at	work — — — — — — — — — — — — — — — — — — —	Program			Rehable — — — — — — — — — — — — — — — — — — —	bilitation	Center

¹ Frequencies depicted here were derived from the 'Type of School of 1st Vocational/Technical Pgm Since Last Int' series.

² The reference period for all survey years except 1979 and 1988 was "since the date of last interview."

Types of Skill Training Across Questionnaire Sections: Comparable types of training data collected within various sections of the questionnaire, i.e., the "Government Training," "Jobs," "Military," "Training," or "Other Training" sections, have been grouped together in Table 4.38.6. Variables represented in the table include those that have the following types of training represented either within their variable title or as a coding category: basic skill training, occupational skill training (classroom), occupational skill training (on-the-job), or occupational skill training (apprenticeship program). Questions on employer-specific training were fielded during select survey years and are also included in Table 4.38.6. Variables dealing with participation in programs called "work experience" are excluded since the focus of such activities is the development of good work habits and not the acquisition of basic or occupational skills. Users should note that (1) universes for the various sets of training and provider variables differ and (2) there is not always a clear distinction between types of training or types of providers or services. The wording of some questions, for example, combines more specific on-the-job training with general work experience. Similarly, the training category "on-the-job training" can be a type of vocational/technical program, a service provided in conjunction with either a government job or a government training program, or a type of training for a military job.

Table 4.38.6 "Other Training" & "Training" Sections of the NLSY79 Surveys: 1979–2000

Training Type	Survey Years	Area of interest
Basic Skill Training ¹		
'Services Provided - Classroom Training in Govt Program? Job #1–5' (Reading, Writing, or Arithmetic)	1979–87	Government Jobs
'Services Provided - GED Preparation in Govt Program? Job #1–5'	1979–87	Government Jobs
'Services Provided - Govt Program Training - English as a 2nd Language? Job #1–5'	1979–87	Government Jobs
'Services Provided - College Preparation in Govt Program? Job #1-5'	1979–87	Government Jobs
'Services Provided, 1st/2nd Govt Program Training Since Jan 1978/Since Last Int - Class Training?' (Reading, Writing, or Arithmetic)	1979–86	Government Training
'Services Provided, 1st/2nd Govt Program Training Since Jan 1978/Since Last Int - GED Preparation?'	1979–86	Government Training
'Services Provided, 1st/2nd Govt Program Training Since Jan 1978/Since Last Int - English as a 2nd Language'	1979–86	Government Training
'Type of 1st/2nd/3rd/4th Vocational/Technical Pgm Since 86/Prior Int/Since Last Interview- Basic Skill' (GED, English, or Math)	1988–94	Training
'Changes in Workplace - Upgrade Employees Basic Skills', CPS Employer - Job Change Past 12 Months	1993–94	Training
Occupational Skill Training - Classroom		
'Services Provided - Skills Training in Govt Program Job? Job #1–5'	1979–87	Government Jobs
'Services Provided, 1st/2nd Govt Program Training Since Jan 78/Since Last Interview - Skills Training'	1979–86	Government Training
'Type of 1st/2nd/3rd/4th Vocational/Technical Pgm Since 86/Prior Int/Since Last Interview' (Job Skill)	1988–94	Training
'Formal (School) Training for Military Job Held?/for Other Military Job Held?'	1979–85	Military

¹ The 1980 School Survey also collected information on whether remedial English, remedial mathematics, or English as a second language had been taken at the last secondary school attended.

Table 4.38.6 (continued) "Other Training" & "Training" Sections of the NLSY79 Surveys: 1979–2000

Training Type	Survey Years	Area of interest
Occupational Skill Training - On-the-Job Training		
'Services Provided - OJT in Govt Program? Job #1–5'	1979–87	Government Jobs
'Govt Program Job - Sponsor of Job #1–5' (CETA On-the-Job Training; MDTA On-the-Job Training)	1979–87	Government Jobs
'Services Provided, 1st/2nd Govt Program Training Since Jan 1978/Since Last Int - OJT?'	1979–83	Government Training
'Govt Program Job or OJT Since Jan 1978/Since Last Int'	1979–84	Jobs, Misc. 1979
'Did R Have Govt Program Part-time Job, Summer Job, or OJT Since Last Int?'	1985–87	Misc. xxxx
'Type of Experience Prior to Current Job/Most Recent Job - OJT with Current Employer/OJT with Previous Employer'	1989, 1990	Misc. xxxx
'Type of 1st/2nd/etc. Vocational/Technical Pgm Since 86/Prior Int/Since Last Int - OJT'	1988–96	Training
'Placed in a Job as Part of Govt Pgm Training Job #1–5' (Work Experience or OJT)	1984–87	Misc. xxxx
'OJT for Military Job Held? for Other Military Job Held?'	1979–85	Misc. 1979, Military
'Time Use - Working - Apprenticeship or OJT in Last Week?'	1981	Time Use
Occupational Skill Training - Apprenticeship Program		
'Type of School 1st/2nd/etc. Vocational/Technical Pgm Enrolled in At Last Int' - Apprenticeship	1979–86	Training
'Type of School 1st/2nd/3rd Vocational/Technical Pgm Enrolled in Before Jan 1978/Since Last Int' - Apprenticeship	1979–86	Training
'Type of School 1st/2nd/3rd/4th Vocational/Technical Pgm Since Last Int'	1988–2000	Training
'Type of School 1st/2nd/3rd/4th/5th/6th Vocational/Technical Pgm Since Last Int'	1993–2000	Training
'1st/2nd/3rd/4th/5th Govt Program Training Enrolled in Prior to Jan 1978' - Apprenticeship Program	1979	Government Training
'1st/2nd Govt Program Training Enrolled in Since Jan 1978/Since Last Int' - Apprenticeship Program	1979–86	Government Training
'Type of Experience Prior to Current Job/Most Recent Job - Apprenticeship'	1989, 1990	Misc. xxxx
'Time Use - Working - Apprenticeship or OJT in Last Week?'	1981	Time Use
Employer-Specific Training		
'1st/2nd Vocational/Technical Pgm Enrolled in At/Since Last Int for Job? (Unemployed)'	1982–84	Training
'1st/2nd Vocational/Technical Pgm Enrolled in At/Since Last Int for Job?/for Job with Employer? (Employed)'	1982–84	Training
'Type of Experience Prior to Current Job/Most Recent Job - OJT with Current Employer/OJT with Previous Employer'	1989–90	Misc. xxxx
'Primary Reason for Taking 1st/2nd/etc. Vocational/Technical Pgm Since Last Int?'	1991–2000	Training
'1st/2nd or 1st/2nd/3rd/4th Vocational/Technical Pgm Enrolled in At/Since Last Int Needed for Job Promotion'	1990–96	Training
'1st/2nd/3rd/4th Trng Useful in Doing Different Work for CPS Employer'	1993–96	Training
'1st/2nd/3rd/4th Trng Useful in Doing Same Work for Employer Other than CPS Employer'	1993–96	Training
'1st/2nd/3rd/4th/5th/6th Trng Useful in Doing Different Work for CPS Employer'	1993–96	Training
'1st/2nd/3rd/4th/5th/6th Trng Useful in Doing Same Work for Emp Other than CPS Employer'	1993–96	Training

Survey Instruments: These data are collected in the following sections of the NLSY79 questionnaires:

Other Training/Training: Section 14 (1979), Section 11 (1980), Section 10 (1981–82), Section 9 (1983–86), Section 8 (1988–2000), and the *Employer Supplements (ES)* (1984–87 and 1993).

Government Training: Section 13 (1979); Section 10 (1980); Section 9 (1981–82); and Section 8 (1983–87).

Government Jobs: Sections 9 and 10 (1979); Section 8 (1980); Section 7 (1981–82); Section 6 (1983–87), and the *Employer Supplements (ES)* (1980–87).

<u>CPS</u>: Section 5 (1989 and 1990).

Military: Section 7 (1979), Section 6 (1980), Section 5 (1981), and Section 4 (1982–85).

<u>Time Use</u>: Sections 15 and 16 (1981).

Documentation: "Attachment 3: Industry and Occupation Codes" in the NLSY79 Codebook Supplement presents the Census Bureau codes used to classify the job for which the respondent was being trained (1979–86) and the field/trade in which a certificate, license, or journeyman's card was obtained (1979 & 1980). "Attachment 6: Other Kinds of Training" provides the two-digit codes for up to four other types of training in which the respondent had ever participated as of the 1979 interview. "Attachment 7: Other Certificate Codes" provides the 1979 coding for up to four degrees or licenses ever received. Sections G-I of the NLSY High School Transcript Survey: Overview and Documentation provide alphabetical and numeric lists of high school course codes and a copy of the "Transcript Coding Sheet."

Data Files: Core training variables are found in the area of interest "Training." The 1979 and 1980 collections of degrees and certifications are located in "Degrees & Certificate." The 1979 activities during last summer series is in "Misc. 1979." The set of remedial courses taken while in high school are located in "School Survey," and the 1981 time use questions can be found in "Time Use." The 1989 and 1990 CPS experience prior to current job variables are located in "Misc. xxxx" and the military training/OJT series are in "Military." The "Transcript Survey" area of interest contains the high school subject course code variables.

User Notes: Pollard (1981) reports, in an analysis of the 1979 "Other Training" data, that in-school vocational training was being incorrectly reported within this section. R07443., 'Employed When Began 3rd Vocational/Technical Pgm Enrolled in Since Last Interview,' has been placed in the "Misc. 1982" area of interest; comparable variables relating to the first and second program, R07429. and R07415., are located in "Training."

References

Bartel, Ann P. and Sicherman, Nachum. "Technological Change and On-the-Job Training of Young Workers." Working Paper, Columbia University, 1993.

Bureau of Labor Statistics. "Education and Training of American Workers." Paper Prepared for the Organization for Economic Cooperation and Development National Experts Group on Training Statistics. Washington, DC: U.S. Department of Labor, 1990.

Bureau of Labor Statistics. Work & Family: Employer-Provided Training Among Young Adults. Report No 838. Washington, DC: U.S. Department of Labor, 1993.

Gritz, R. Mark. "The Impact of Training on the Frequency and Duration of Employment." *Journal of Econometrics* 57,1–3 (May–June 1993): 21–51.

- Heckman, James J.; Cameron, Stephen V.; and Schochet, Peter Z. "The Determinants and Consequences of Public Sector and Private Sector Training." Discussion Paper 92-15. Washington, DC: Bureau of Labor Statistics, U.S. Department of Labor, 1992.
- Hills, Stephen M. "Longitudinal Analyses of Training Processes in the United States." Columbus, OH: CHRR, The Ohio State University, 1982.
- Hills, Stephen M. and Leigh, Duane. "Employer-Sponsored Training, Union Status, and the Wage Rates of Young Women." Presented: Vancouver, B.C., Meetings of the Western Economic Association, 1987.
- Leigh, Duane E. "What Kinds of Training 'Work' for Noncollege Bound Youth." Report for the General Accounting Office, 1989.
- Loewenstein, Mark A. and Spletzer, James R. "Informal Training: A Review of Existing Data and Some New Evidence." NLS Discussion Paper No. 94-20. Washington, DC: Bureau of Labor Statistics, U.S. Department of Labor, 1994.
- Lynch, Lisa M. "The Impact of Private Sector Training on Race and Gender Wage Differentials and the Career Patterns of Young Workers." Discussion Paper 92-8. Washington, DC: Bureau of Labor Statistics, U.S. Department of Labor, 1992.
- Lynch, Lisa M. "The Role of Off-the-Job versus On-the-Job Training for the Mobility of Women Workers." *The American Economic Review* 81,1 (May 1991): 151–56.
- Maxwell, Nan L. "Basic Skills, Occupational Training, and Wage Differentials Between Young Black and Non-black, non-Hispanic Males." Working Paper, California State University, 1991.
- Mangum, Stephen L. and Ball, David E. "Military Skill Training: Some Evidence of Transferability." *Armed Forces and Society* 13,3 (Spring 1987): 425–41.
- Mangum, Stephen L. and Ball, David E. "The Transferability of Military-Provided Occupational Training in the Post-Draft Era." *Industrial and Labor Relations Review* 42,2 (January 1989): 230–45.
- National Center for Research in Vocational Education and Center for Human Resource Research. *NLSY High School Transcript Survey: Overview and Documentation.* Columbus, OH: CHRR, The Ohio State University.
- Pollard, Tom. "An Overview of the Post School Vocational Training Experiences of Youth." In *Pathways to the Future. A Report on the National Longitudinal Survey of Youth Labor Market Experience in 1979.* Michael E. Borus, ed. Columbus, OH: CHRR, The Ohio State University, 1981.
- Schiller, Bradley R. "Minimum Wage Youth: Training and Wage Growth." In *Proceedings of the Forty-Third Annual Meeting of the Industrial Relations Research Association* (1990): 266–75.
- Veum, Jonathan R. "Sources of Training and their Impact on Wages." *Industrial Labor Relations Review* 48,4 (July 1995): 812–26.
- Veum, Jonathan R. "Training Among Young Adults: Who, What Kind, and for How Long?" *Monthly Labor Review* 116,8 (August 1993): 27–32.

Waite, Linda J. and Berryman, Sue E. "Job Stability Among Young Women: A Comparison of Traditional and Nontraditional Occupations." *American Journal of Sociology* 92,3 (November 1986): 568–95.

NLSY79 Children

In each survey, information has been collected from the children aged 15 and older, the young adults, on their participation in training programs. Respondents were asked to identify the type of training, the duration of the program, and the source of money to pay for the training. In addition, respondents were asked if the training was useful on the current job or if it helped them to get a different job. Finally, the young adults were asked if they had acquired any kind of certificate for practicing a profession or trade. Beginning in 2000, detailed questions were asked only of the current or most recent training program.

Survey Instruments: The series of questions pertaining to training are located in the "Other Training" section of the NLSY79 Young Adult Questionnaires.

4.39 Wages

NLSY79

This section reviews select wage, time unit, and earnings data available for the NLSY79. Data on respondents' usual earnings (inclusive of tips, overtime, and bonuses but before deductions) have been collected during every survey year for each employer for whom the respondent worked since the last interview date. The amount of earnings, reported in dollars and cents, is coupled with information on the applicable unit of time, e.g., per day, per hour, per week, per year, etc. Between 1988 and 1993, those respondents reporting any unit of time other than "per hour" have been asked a follow-up question on whether they were paid by the hour on that job; if so, an hourly wage rate was collected.

The raw earnings data, collected in the *Employer Supplements* during 1980–2000 and in Section 10 of the 1979 questionnaire, can be found in the variable series 'Rate of Pay Job #1–5' and 'Time Unit of Rate of Pay Job #1–5.' Two sets of variables provide information based on the combined earnings and time unit data. The first set, 'Hourly Rate of Pay Job #1–5,' provides the hourly wage rate for each job as reported. The actual responses of those respondents who report wages with an hourly time unit in the initial earnings question appear in this variable. For those reporting a time unit other than "per hour" or "other" in the initial earnings question, CHRR calculates an hourly rate of pay.

Users should note that (1) the calculation procedure, which factors in each respondent's usual wage, time unit of pay, and usual hours worked per day/per week produces, at times, extremely low and extremely high pay rate values; (2) no editing of actual values reported by a respondent occurs even if the value is extreme, e.g., \$25,000 per hour; (3) no 'Hourly Rate of Pay Job #1–5' data are available for those respondents reporting a time unit of "other"; and (4) any hourly wage rate information reported in the 1988-1993 follow-up question is not included in the creation statements.

A second set of variables based on responses to the initial set of wage/time unit questions, entitled 'Hourly Rate of Pay Current/Most Recent Job,' identifies the hourly earnings for the job identified as the CPS job, i.e., the job that the respondent held most recently. Hourly wage rates for those respondents who reported a time unit other than "per hour" can be found in the 1988–93 variables series, 'Paid by the Hour (Time Unit Other than Hourly Previously Reported) Job #1–5' and 'Hourly Rate of Pay (Rate Other than Hourly Previously Reported) Job #1–5.' Table 4.39.1 depicts the core set of rate of pay variables present on the NLSY79 Main Data Files and comparable variables on the NLSY79 Work History Data File.

Table 4.39.1 Core Rate of Pay Variables: NLSY79 Main & Work History Files

NLSY79 I	Main Files		NLSY79 Work History File				
Variable Title Years Area of interest		Variable Description/Each Job	Years	Variable Name			
Rate of Pay Job #1–5	1979–2000	Job Information	Usual Wage or Salary at this Job	1979–2000	PAYRATE		
Time Unit of Rate of Pay Job #1–5	1979–2000	Job Information	Time Unit to Interpret Payrate	1979–2000	TIMERATE		
Hourly Rate of Pay Job #1–5	1979–2000	Job Information	Usual Wage Converted to Hourly Wage	1979–2000	HOURLYWAGE		
Hourly Rate of Pay Current/Most Recent Job	1979–93	CPS	Usual Wage Converted to Hourly Wage, and Is this Job the Same as the CPS Job	1979–2000	HOURLYWAGE CPSJOB		

Follow-up questions fielded during 1986–2000 asked those respondents whose earnings had changed for wage rate and time unit information at the time they first started working for a new employer. In 1986 and 1987, those who were not working for the employer at the interview date were also asked for wage information at the time they left that employer. These data can be found in the following variables: 'Wages Changed Since First Began Working Job #1–5,' 'Rate of Pay When 1st Began Working at Job #1–5,' 'Time Unit of Rate of Pay When 1st Began Working at Job #1–5,' 'Rate of Pay When Last Worked at Job #1–5,' and 'Time Unit of Rate of Pay When Last Worked at Job #1–5.'

User Notes: The HOURSWEEK variable from the NLSY79 Work History data set is used in the creation of HOURLY RATE OF PAY. The HOURSWEEK creation procedure reflects the number of hours usually worked per week for the CPS job or Job #1–5. For those who report that they performed one or more hours of work at home and that the number of hours worked at home was not included in the usual hours worked per week, the total number of hours usually worked including work at home is used. This inclusion of home hours has produced, for a small number of respondents, extreme hourly rates of pay due to the fact that both the hours worked at home and hours worked at a place of business are counted. Low numbers in total hours worked—for respondents who did not include home work in their first reported usual hours worked—produce, when combined with rate of pay, erroneous hourly rates of pay. For the most part, accurate total hours worked can be constructed from these raw data.

Survey Instruments & Documentation: Section 10, "Jobs," of the 1979 questionnaire and the Employer Supplements for 1980–2000 collected these raw data. Creation procedures appear in Table 4.39.2.

Data Files: The 'Rate of Pay Job #1–5,' 'Time Unit of Rate of Pay Job #1–5,' and 'Hourly Rate of Pay Job #1–5' variables for each job can be found in the "Job Information" area of interest on the main

NLSY79 data files. The 'Hourly Rate of Pay Current/Most Recent Job' (1979-1993) variables for each year are located in the "CPS" area of interest. All other main file variables discussed above have been placed in the yearly "Misc. xxxx" areas of interest. The Work History data set contains the wage rate and time unit variables listed in the table above.

Program Derivation: The PL/1 statements which create 'Hourly Rate of Pay Job #1–5' and 'Hourly Rate of Pay Current/Most Recent Job' read as follows:

Table 4.39.2 Computer Code to Create Hourly Rate of Pay

```
IF PAYRT(NEWYR,JOB#)>0 & TIMERATE(NEWYR,JOB#)>0 THEN DO;
IF PAYRT(NEWYR, JOB#)=9999995 THEN RETURN(-4);
ELSE IF TIMERATE(NEWYR, JOB#)=1 THEN RETURN(PAYRATE(NEWYR, JOB#));
ELSE IF TIMERATE(NEWYR, JOB#)=2 & HOURDAY(NEWYR, JOB#)>0 THEN
RETURN((FLOOR(PAYRT(NEWYR,JOB#)/HOURDAY(NEWYR,JOB#))));
ELSE IF TIMERATE(NEWYR, JOB#) >= 3 & TIMERATE(NEWYR, JOB#) < 7 &
HOURSWEEK(NEWYR, JOB#)>0 THEN DO;
IF TIMERATE(NEWYR, JOB#)=3 THEN
RETURN((FLOOR(PAYRATE(NEWYR,JOB#)/HOURSWEEK(NEWYR,JOB#))));
ELSE IF TIMERATE(NEWYR, JOB#)=4 THEN
RETURN((FLOOR(PAYRT(NEWYR,JOB#)/(HOURSWEEK(NEWYR,JOB#)*2)))):
ELSE IF TIMERATE(NEWYR, JOB#)=5 THEN
RETURN((FLOOR(PAYRT(NEWYR,JOB#)/(HOURSWEEK(NEWYR,JOB#)*4.3))));
ELSE IF TIMERATE(NEWYR, JOB=6 THEN
RETURN((FLOOR(PAYRT(NEWYR,JOB#)/(HOURSWEEK(NEWYR,JOB#)*52))));
ELSE IF TIMERATE(NEWYR, JOB#)=8 THEN
RETURN((FLOOR(PAYRATE(NEWYR, JOB#)/HOURSWEEK(NEWYR, JOB#)*2.15)));
END;
ELSE RETURN(-4):
END;
ELSE RETURN(-4);
```

NLSY79 Children

Data on the usual earnings as well as the hourly rate of pay has been collected each survey from the children aged 15 and older, the young adults, for up to the last 5 jobs held by the respondent. In addition from 1994 to 1998 respondents who were completing the young adult survey for the first time were presented with a number of hypothetical job offers. Each job offer contained a wage offer as well as a brief description of the job duties, and respondents were asked whether or not they would accept the offer.

Survey Instruments: Questions pertaining to usual earnings can be found in the Employer Supplement sections of the NLSY79 Young Adult Questionnaires. The series of hypothetical job offers are contained in the "Attitudes" section of the 1994, 1996, and 1998 instrument.

4.40 Work Experience

General Work Experience

The work experience information collected in the NLSY79 is of two types. Each survey collects cross-sectional information pertaining to (1) the respondent's activities during the full week preceding the week of the survey; (2) characteristics of the current or most recent employer and of any other employers for whom the respondent worked; (3) military service; and (4) any gaps in employment. This information taken together comprises a relatively complete picture of the respondent's labor force activities between the previous and current interview dates. In addition to the large core of cross-sectional information stretching from the first survey, periodic inclusion of new questions provides additional data largely specific to the time in which they were collected. Some of these questions are retained through a number of years, while others are included for one or several years and discontinued. Discussions and explanations of cross-sectional elements of NLSY79 data are presented in separate sections of this guide, e.g., "Labor Force Status," "Jobs & Employers," "Class of Worker," "Occupations," "Industries," "Time & Tenure with Employers," "Job Satisfaction," and "Wages."

From this information and other retrospective information, a longitudinal record spanning from the date of, and to some extent the time preceding, the first interview through the most current interview date can be constructed for each respondent. The longitudinal record is maintained even for respondents who are not interviewed in interim years. Each year's questionnaire incorporates retrospective questions designed to recover as completely as possible information lost (or incorrectly reported or recorded) during previous survey years. For example, a respondent interviewed in 1984 and not interviewed again until 1989 will have a complete labor force history as of the 1989 interview, as information for the intervening period will be recovered in 1989. Researchers should be alert to the possibility of gaps and discrepancies in some records over time, due to inconsistencies in actual respondent reporting and/or interviewer error. However, these have not appeared to be a major factor in the quality and completeness of the NLSY79 employment and labor force history.

The ability to link identical employers through survey years allows longitudinal examination of not only general labor force activity, but also employer-specific experience. "Appendix 9: Linking Jobs Through Survey Years," present within both the *NLSY79 Codebook Supplement* and the NLSY79 Work History documentation, provides additional information. On the Work History CD, this appendix is in a file called *EMPLINK.TXT*.

Longitudinal Work Experience Record

This section discusses information on various aspects of the longitudinal work experience record available for each respondent of the NLSY79.

Number of Employers: The most basic longitudinal information available for respondents is the total number of employers for whom a respondent worked during a given period (e.g., in the past calendar year, since the last interview, between 1979–81) and the total number of employers (part-time and full-time) ever reported by a respondent. It is possible to construct a more or less complete inventory of the number of jobs for all respondents from the age of 18 years and older; note the age effects discussion below.

"Employers" versus "Jobs": Unless explicitly noted, the NLSY79 work history data are employer-based. Therefore, any reference to "job" is a reference to a specific employer. Information about specific duties and positions and/or changes in duties or position is collected, with reference to a specific employer, only at the point of interview (with limited exceptions in specific survey years). For example, a respondent may regard himself/herself as having held a number of "jobs" or positions with employer #1 (Job #1). However, any information collected about these different positions would be included as information about the respondent's experience with that employer (#1) at the point of interview for a specific year. Based upon this characteristic of these data, researchers are cautioned that counting changes in occupations can not necessarily be equated with total job changes or employer changes. For example, it is possible for a respondent to hold more than one occupation with the same employer during the time between interviews. Yet, except in restricted survey years, the only occupation specifically reported at the point of interview would be the current/most recent occupation. Likewise, a respondent may hold the same occupation through his/her tenure with several employers.

Effect of Age of Respondent on Employment Information: For those respondents who were 18 or older at the time of the first interview (1979), information about work history is recovered retrospectively to the age of 18. Information preceding this age may be relatively limited for these respondents. However, reported employers became part of the ongoing survey record of respondents who were younger than 18 at the time of the first survey. The depth of information for all jobs but the CPS job for respondents younger than 16 is somewhat restricted during the early survey years. Despite restrictions, a good deal of information is still available for those who were 15 years of age or under at the first interview point. More information on age restrictions is available in the "Age" section of this guide.

Part-time versus Full-time Employers: Industry, occupation, and class of worker information is not collected for any part-time and/or short term employer who is not the CPS employer. This is also the case for year-specific modules, such as the 1990 promotion series. However, other basic information, such as start and stop dates, gaps within tenure with part-time and/or temporary employers, hours worked per day

and per week, and wages/salary, is available, comparable to that available for full-time employers. In the event that a part-time/short-term employer is the CPS employer, complete data, including industry, occupation, and class of worker, are collected regardless of the nature of the job. Therefore, reasonable opportunity exists for comparisons of part-time/short-term and full-time employers, particularly if the part-time/short-term employer is the CPS employer.

Double-Counting of Employers: Users should be aware that a small degree of double-counting of employers may occur when data are collected. Until 1998 employers were only tracked between contiguous interview years in which information was collected on the specific employer. It is therefore conceivable that a respondent who works for a particular employer during one year, leaves that employer, and then returns to that same employer after a year or more, would appear to be working for a new employer during the second tenure because the previous tenure with that employer would have slipped out of scope for tracking purposes. See also the "Jobs and Employers" section of this guide. Starting in 1998, the NLSY79 began keeping a roster of all employers to enable the CAPI instrument to recognize when a respondent returns to an employer that they left a number of years earlier.

Despite these limitations, NLSY79 data allow for the construction of a relatively complete and detailed employment history for respondents from January 1, 1978 (and possibly points preceding), through the most current year in which a respondent was interviewed.

Related Created Variables (Number of Employers): 'Number of Jobs Ever Reported as of Interview Date (All Interview Years).'

Related Documentation (Number of Employers): "Linking Jobs Through Survey Years" is included in the NLSY79 Work History documentation and as Appendix 9 of the NLSY79 Codebook Supplement. See also the "Jobs and Employers" section of this guide.

Tenure with Specific Employer

A second type of basic information that can be constructed from NLSY79 longitudinal labor force experience data is a history of tenure (in weeks) with each employer reported up to the most current survey year for a given respondent; see the "Time & Tenure with Employer" section of this guide for additional information. Tenure is cumulative through contiguous survey years, beginning on the first date the respondent reports working for the employer (the start date) and ending on the date the respondent reports leaving the employer (the stop date). If a respondent started working for an employer before or on the date of last interview, tenure since the date of last interview is added to the already existing time to reflect total tenure. If the respondent is working for the employer on the current interview date, the stop

date is set to the current date. If the respondent reports working for this employer at the next interview, tenure between interviews is added to the total tenure figure.

For example, imagine the following scenario. A respondent starts working for COMPANY A on July 7, 1989, and is interviewed on July 31, 1989. She is still working for that company on August 1, 1990, when she is interviewed again. She continues to work for the same company until May 15, 1991 when she leaves. She is interviewed again on August 15, 1991. A cumulative tenure in number of weeks would be constructed in three stages:

```
T1 = [Tenure from July 7, 1989 – July 31, 1989 at the 1989 interview]
```

T2 = T1 + [Tenure from August 1, 1989 – August 1, 1990 at 1990 interview]

T3 = T1 + T2 + [Tenure from August 2, 1990 – May 15, 1991 (time worked for COMPANY A between 1990 and 1991 interview, before respondent left)]

TENURE WITH COMPANY A (at 1989 interview) = T1

TENURE WITH COMPANY A (at 1990 interview) = T2

TENURE WITH COMPANY A (at 1991 interview) = T3

A total tenure through contiguous survey years is available for all employers, full- and part-time, for whom valid start and stop dates of employment are reported. This is accomplished by linking identical employers through contiguous survey years; see Appendix 9 in the *NLSY79 Codebook Supplement* or the NLSY79 Work History documentation for more information. The construction of employer tenure occurs within the more expansive programming structure that produces the separate NLSY79 Work History data set. For more information on the consequences of missing start and stop dates, users should refer to the "Work History" section of this guide, which is devoted to a discussion of this data set.

"Employer" Tenure versus "Job" Tenure: Researchers must be cognizant of the employer-based nature of these data (see the discussion above on "Number of Employers"). Tenure figures reflect time with a specific employer, not time performing a specific occupation with an employer. However, by using data on reported timing and nature of promotions present in two survey years for the CPS job and in 1990 for all jobs, it may be possible to impose some sense of change in occupations over certain periods of time.

Double-Counting of Employers and "Broken" Tenure: Users should be advised that the limited possibility of double-counting of employers (discussed above) allows a slight chance of tenure with a single employer being calculated as tenure with two separate employers. An employer for whom the elapsed time between stints exceeds the capacity for continuous tracking will likely appear as two separate employers with two separate (and shorter) total tenure periods.

Gaps within Tenure with Specific Employer: Total tenure with an employer extends from reported start date to stop date. In addition, respondents may report gaps of a week or more during the period of

association with an employer that fall within the period between start and stop dates. Unpaid gaps within tenure with the same employer are reported in association with a specific employer. They occur between the start and stop dates given for an employer. The respondent does not consider himself/herself completely disassociated from the relevant employer during these periods, although s/he was not actively working for that employer. Specific variables for each gap include start and stop dates; the reason that the respondent was not working during a given gap; the number of weeks that a respondent was unemployed (looking for work or on layoff) and/or out of the labor force (OLF or not looking for work) during a given gap; and, for those who were OLF at some time during a gap, the reason they were not looking for work.

Although a respondent may report himself or herself to be out of the labor force or unemployed during these gaps, these weeks are included in the calculation of total tenure with that employer because they occur before the respondent has reported an actual stop date for his or her association with that employer. Therefore, these weeks are considered part of the period for which the respondent considers himself/herself associated with that employer.

Users wishing to adjust total tenure with an employer to reflect such gaps must do so independently, by calculating the length of reported gaps and eliminating them from the total tenure value. This can be done over the total of reported gaps or selectively, depending upon the reason and/or labor force activity classification (out of the labor force versus unemployed) of individual gaps.

Related Created Variables (Tenure with Specific Employer): 'Total Tenure in Weeks with Employer (Job #1–5)' (All Interview Years).

Related Documentation (Tenure with Specific Employer): "Linking Jobs Through Survey Years," found both within the NLSY79 Work History documentation and the NLSY79 Codebook Supplement, as well as the "Work History Programs" and "Work History Program Description" sections of the NLSY79 Work History documentation, provide information on tenure related variables.

Cumulative Labor Force Experience

The standard set of definitions of labor force status used by the Current Population Surveys (CPS) is used for coding the employment status of NLSY79 respondents. The NLSY79 Work History programs incorporate further refinements to allow for weeks of indeterminate status, due to erroneous respondent reporting or interviewer recording (see the "Work History" section of this guide). The NLSY79 summary indicators are then constructed, using these Work History definitions for weekly labor force status. The "Labor Force Status" section of this guide includes detailed definitions of CPS and NLSY79 Work History labor force concepts.

The detailed collection of dates of employment and gaps in employment over the history of the NLSY79 allows construction of a cumulative picture to be constructed of a respondent's labor force activity over the course of the survey. A large number of summary variables are created based upon the week-by-week labor force status arrays produced by the Work History program; see also the "Work History" and "Labor Force Status" sections of this guide for more information. These summary variables provide a count of the number of weeks a respondent held a given labor force status, the total number of hours worked (if any), and the total number of weeks since the respondent's last interview. Variables are also calculated indicating the percentage, if any, of weeks that are not accounted for in the summary variables discussed above, due to missing data or indeterminate status in the Work History arrays.

These variables, constructed within the Work History programs, consist of two sets. One series uses "Last Interview Date" as the reference period, and the second uses "Past Calendar Year" (the full calendar year previous to the year of current interview) for its summations. However, it is possible for researchers to construct similar cumulative figures for periods of time of particular interest to them. For instance, one may be interested in compiling a summary of work and/or labor force experience for respondents over a specific five-year period. Similarly, a summary of activities with employers having certain characteristics (part-time, temporary, full-time, CPS, certain levels of earnings, etc.), as well as the extent of such practices such as dual job holding among respondents, may be compiled. A gaps history can also be assembled using, as appropriate, gaps reported within the tenure with an employer and/or gaps where no employer affiliation is reported.

Cumulative Active Military Service: Cumulative weeks of active military service are constructed during the creation of the NLSY79 Work History data set. However, civilian employment has precedence over military activity in the week-by-week labor force status arrays. Therefore, the number of weeks in active military service in the past calendar year will not include any weeks during which the respondent also held a civilian job. The full period of active military enlistment can be verified by using data on enlistment and discharge dates from the actual military section in the main questionnaire. The number of weeks in the active military since the last interview is calculated by subtracting the starting week from the ending week so that the entire tenure is included.

Gaps between Employers (No Affiliation with an Employer): As mentioned, gaps may be reported between the start and stop dates for a given employer, reflecting periods for which a respondent considers himself or herself affiliated with an employer but not actively working. In addition, gaps in employment reflect periods when the respondent reported no affiliation with any employer. These gaps are often referred to as "between-job gaps."

Indeterminate Labor Force Status during Gaps: The exact duration of gaps in weeks (within-job gaps or between-job gaps) is available, as well as the number of those weeks the respondent was "out of the labor force [OLF] - not looking for work" as opposed to "unemployed - looking for work or on layoff." Therefore, if a respondent was OLF or unemployed for the entire period of the gap, the specific weeks for those labor force states can be determined. However, for a gap in which the respondent was OLF part of the time and unemployed part of the time, the specific weeks that the respondent occupied each status cannot be determined. Researchers should be aware that, while the number of weeks the respondent occupied each status is accurate, the precise weeks for each status may not be. The "Work History Data" section of this guide provides details on the assignment of non-employed labor force states.

Weeks with Indeterminate Activity: Users should be aware that, under some circumstances, it is not possible to determine labor force status for a given week. These indeterminations arise with incomplete and/or invalid start or stop dates for employers or gaps, e.g., an element of the date is missing or the stop date precedes the start date. Variables reflecting the percentage of weeks that were unaccounted for since the last interview and in the past calendar year are computed. Hence, users may find respondents who worked 52 weeks of the year but also have 100 percent of their weeks unaccounted for. These variables alert researchers to problem cases that may need to be examined more closely and/or eliminated from analysis. The "Work History Data" section of this guide provides additional information.

Employer Characteristic Histories: It is possible to build a limited history of certain employer-based characteristics (earnings/hourly wages, occupation, etc.). These histories will be limited in the sense that many of these characteristics are reported only at the date of each interview. Should change occur from one interview date to another, the point of actual change can not, in most instances, be precisely determined. (Information collected in select survey years may permit more definitive identification of interim changes occurring between interview dates for certain characteristics.)

Strictly speaking, it is possible that an occupational change from one interview year to the next could reflect only one of several during the period between interviews. Characteristics such as hourly wage may be of less concern in this regard, as some numeric progression or regression should be apparent. However, even for these indicators, interim and temporary cutbacks in compensation in times of economic downturn may be missed. These limitations noted, a reasonably complete history of experience with specific employers, e.g., CPS (current/most recent) employer or all employers, can be built using NLSY79 records.

CPS Employer as a Primary Focus: The CPS employer (current/or most recent at date of interview) is the focus of many researchers. These employers can be linked in much the same way as non-CPS employers, with one extra set of variables identifying the employer as CPS. However, it is important to

note that, while the CPS employer is usually the first employer, this is not always the case in survey years 1979–92.

Discrepancies in the order in which interviewers administered, or respondents reported, employers for *Employer Supplements* resulted in a relatively small number of cases in each pre-CAPI survey year for which the CPS is not the first employer, but rather Job #2 or Job #3, etc. The CPS employer can be identified in each year by a "yes or no" variable, which is present for each employer. A "1 - yes" code indicates the CPS employer. It is possible that an employer that is the CPS employer in one year and remains the CPS employer in the next year will be Job #1 in the first year and Job #2 (or higher) in the second year. In this case, the information for Job #2 in the second year would be a continuation of the information for Job #1 in the first survey year. In 1993 and after, CAPI instruments ensure that the CPS job (if one exists) will always be Job #1.

Related Created Variables (Cumulative Labor Force Experience):

Number of Weeks Worked since Last Interview

Number of Weeks Worked in Past Calendar Year

Number of Hours Worked since Last Interview

Number of Hours Worked in Past Calendar Year

Number of Weeks out of Labor Force since Last Interview

Number of Weeks out of Labor Force in Past Calendar Year

Number of Weeks Unemployed since Last Interview

Number of Weeks Unemployed in Past Calendar Year

% Weeks Unaccounted for since Last Interview

% Weeks Unaccounted for in Past Calendar Year

Weeks since Last Interview

Weeks in Active Military Service since Last Interview

Weeks in Active Military Service in Past Calendar Year

Related Documentation (Cumulative Labor Force Experience): The "Work History Programs" (WORKHIST.PL1 on the Work History CD) and "Work History Program Description" (DOC2000.TXT on the Work History CD) sections of the NLSY79 Work History documentation set provide information on the creation of work-related variables.

4.41 Work History Data

The NLSY79 Work History Data File provides researchers with a week-by-week longitudinal work record of each NLSY79 respondent from January 1, 1978, through the current survey date. The nearly 12,000 work history variables include four primary types of information: (1) weekly arrays; (2) job characteristics; (3) employment gaps; and (4) summary labor force related variables.

Beginning with the release of the 2000 data, the Work History file is incorporated into the main NLSY79 data set. Researchers will be able to purchase a single CD containing both main and work history variables and to use the same search and extraction software to view all of the data. Variables previously located on the separate Work History CD can be identified by searching for the "Work History" area of interest. In addition, the reference numbers for work history variables begin with "W" instead of the standard "R."

Weekly Arrays

Week-by-week records of the respondent's labor force status and associated job(s), if employed, and the total number of hours worked each week at any job, if employed, are available. This information is contained in three week-by-week variable arrays:

STATUS Array: Labor Force/Military Status Each Week Beginning January 1, 1978 HOUR Array: Usual Hours Worked per Week at All Jobs Beginning January 1, 1978 DUALJOB Array: Job Numbers for Respondents Who Worked at More Than One Job in

Any Week Beginning January 1, 1978

Although the work history variables only contain data on up to five jobs, data are collected on all jobs. Data for the extra jobs are used to construct summary *KEY* variables. The number of jobs has exceeded ten for one case in 1991 and 1992, two cases in 1998, and one case in 2000.

Job Characteristics

Because the work history arrays are now incorporated with the rest of the NLSY79 data on one CD, there are no longer separate job characteristics variables within the work history data set. Job characteristics variables, such as dates of employment, pay, occupation, industry, and so on, that were previously included on the work history CD can be located in the main file areas of interest as described in the applicable sections of this guide.

Employment Gaps

Gaps within tenure with a specific employer are reported in association with that employer. They occur between the start and stop dates given for an employer. The respondent does not consider himself/herself completely disassociated from the relevant employer during these periods, although s/he was not actively working for that employer. Specific variables for each gap include start and stop dates; the reason that the

respondent was not working; the number of weeks that a respondent was unemployed (looking for work or on layoff) and/or out of the labor force (OLF or not looking for work), and; for those who were OLF at some time during a gap, the reason they were not looking for work. See the "Work Experience" section above for a discussion of gaps with respect to job tenure.

Gaps between employers are gaps in a respondent's employment during which s/he was not associated with any employer. The specific variables collected with respect to "within job gaps" (see the discussion in the "Work Experience" section on tenure with a specific employer) are also collected with respect to gaps between employers, with the exception of the reason that the respondent was not working during the gap.

Summary Labor Force Related Variables

Variables are constructed summarizing different aspects of a respondent's labor force activity, including total number of hours worked, weeks worked, weeks unemployed, weeks out of the labor force, and weeks in active military service. There are two sets of these variables, referring to each of two time periods—the period since the last interview and the past calendar year (see the "Labor Force Status" section of this guide). Variables are also created indicating the number of weeks since the previous interview and the percent of weeks for which a definite status cannot be determined in constructing the summary variables discussed above. See the "Work Experience" section for further notes on these variables.

Survey Instruments & Work History Construction: The work history data are constructed from information gathered in the "Military History," "Current Labor Force Status or CPS," Employer Supplement, and "Periods not Working" sections of the NLSY79 survey instruments. The work history program converts dates reported in these sections (start and stop dates, employment gap dates, enlistment and discharge dates) to week numbers, using January 1, 1978, as week #1. Week-by-week histories of a respondent's labor force activity are constructed by filling in the weeks between the reported beginning and ending dates for different activities (or "inactivities") with the appropriate code. In turn, this weekly accounting makes possible the construction of the summary variables.

Work History-Specific Documentation: Prior to the release of the 2000 data, work history variables were documented in a series of text files on the CD. In 2000, this information was moved to the Codebook Supplement. Appendix 18 in that document provides information about the logic and procedures used to create the work history arrays, as well as additional coding information for selected variables.

Data Files: The majority of the work history variables are constructed from variables found in the "Military," "Job Information," "Periods Not Working within Job Tenure," "Jobs," "CPS," and "Between Jobs Gaps" areas of interest on the main data set. The resulting arrays are located in the "Work History" area of interest. The summary variables are included in the "Key Variables" area of interest.

User Notes: Users should be aware that the work history program constructs and consolidates in one place a great deal of employment-related information, sparing the researcher the time and effort involved in distilling these variables from the NLSY79 main data files. The following paragraphs contain a number of explanatory notes and/or cautions for users of this unique data set.

Of particular interest to many researchers have been the PREVIOUSEMP# and TENURE variables associated with each employer. The PREVIOUSEMP# allows a respondent's association with a given employer to be traced back through contiguous survey years. Using PREVIOUSEMP# and the appropriate stop and start dates, a TENURE variable is constructed for each job reported, which depicts total weeks of tenure with each employer across contiguous survey years. Users are encouraged to examine the work history documentation to determine if any such time-saving variable constructions exist with regard to their specific research interests. Work history data can also be easily employed in association with non-employment-related data from the NLSY79 main data files. A variety of employer characteristic variables can also be linked to the work history data, including:

- Iob benefits
- Promotions
- Ratings of job characteristics
- Activity most of survey week versus usual activity
- Overtime/time-off
- Job search activity
- Why looking/why not looking
- Employer size (in terms of employees)
- Shift worked for CPS employer
- Pregnancy leave
- Reason not working for employer (versus reason not looking for work, which is included in the Work History data set)
- Hourly wage (if first pay rate reported not hourly)
- Pay rate when first started with employer (if pay rate has changed)
- Time use on the job
- Travel/commuting time to and from work
- Job hierarchy/authority structure

The work history is a complete retrospective up to and including the respondent's most recent date of interview. The questions in these survey sections are constructed to collect a complete history for each respondent, regardless of period of non-interview. For example, a respondent previously interviewed in 1984 and not interviewed again until 1989 will have a complete labor force history as of the 1989 interview, as information for the intervening period will be recovered in the 1989 interview. The "Work Experience" section contains a discussion of possible discrepancies or inconsistencies in these data.

Researchers should be aware that, although such possibilities exist, they have not appeared to be a major factor in the quality and/or completeness of the work history record.

Data collected for jobs with full-time/long-term employers/CPS employers are similar to those collected for jobs held on a part-time/short-term basis with non-CPS employers. Although some specific information (most notably occupation, industry, class of worker, and specific modules such as the promotion questions in 1989 and 1990) is not collected for jobs reported to be part-time and/or short-term in nature, other job-specific data (including start and stop dates, reasons for leaving an employer, information on gaps, hours usually worked, and pay rates) are gathered for all jobs, regardless of their nature. Before 1988, information on rate of pay and government sponsorship of jobs was not gathered from those in part-time or short-term jobs. Before 1986, the exclusion for part-time work was 20 hours per week; for 1987 and later surveys, the exclusion for part-time work is 10 hours per week.

Many researchers focus on data for the CPS job. Those wishing to isolate CPS jobs only should take note that, while Job #1 is usually the CPS job, from 1979 to 1992, this is not always the case. The "Work Experience" section of this guide elaborates.

Users should also be aware that for respondents with simultaneous active military status and civilian employment status, civilian labor force activity will take precedence over military status. For the purposes of constructing the week-by-week status array, the civilian job number will replace the military status code for weeks in which both states occur. The order of precedence for various labor force status codes is

detailed in the work history documentation (see the discussion of the work history PL/I program in appendix 18 of the *Codebook Supplement*); see also the "Work Experience" section in this guide.

Missing information on start and stop dates is contained in each series of job-specific variables exactly as it appears in the main NLSY79 data file. For purposes of constructing the status array and computing the summary labor force activity variables, the work history program requires that specific week numbers be assigned on the basis of these dates. In the event that missing data occur in these dates, the program takes one of two actions. (1) If only the day in a given date is missing, the program assigns the number "15," placing these dates in the middle of the month. This allows an approximate week number to be assigned. The possibility still exists, however, that a negative job/gap duration will result because the day is arbitrarily fixed. For example, a start date of 10/-2/90, which indicates a missing day, and a stop date of 10/6/90 would be read by the work history program as 10/15/90 and 10/6/90 respectively. Therefore, when the week numbers are assigned, the arbitrary assignment of "15" as the start day would give an erroneous impression that a job started after it stopped. The status array and computed summary variables will reflect the invalid data in the week numbers. (2) Dates missing a month and/or year cannot be estimated by the work history program and therefore have invalid missing codes for the week numbers. The status array and other computed variables cannot be calculated for activity within periods for which either or both of the dates have such missing information. These will also register invalidly missing information for any period in which specific dates and week numbers cannot be determined.

Descriptive Tables

The tables below are presented to provide information on sample sizes by race and interview year for weeks worked and not worked. The actual reference period is the full calendar year immediately preceding the survey year. "Missing" means that the respondent is a noninterview for that survey year.

Table 4.41.1 Average Number of Weeks Working Per Year for Respondents Who Provided Data in All Years from 1979 to 1998¹

Sex	Race	Potential Respondent Pool	Actual Respondent Pool	Mean Weeks Working		
Male	Hispanic	1000	394	40.0		
	Black	1613	689	34.0		
	Non-black/non-Hispanic	3790	1251	42.1		
Female	Hispanic	1002	477	30.7		
	Black	1561	849	29.5		
	Non-black/non-Hispanic	3720	1457	35.8		

Notes: The average weeks variable was calculated by summing the NLSY79 work history variable WORKCXX over 18 rounds of data and then dividing the result by 18. Only individuals who did not have missing values were used.

¹ Data for 2000 have been collected but processing was not complete at the printing of this guide. These numbers will be updated in the next edition.

Table 4.41.2 Number of Weeks Respondents Are Working, Not Working, and Unknown from NLSY79 1998 Work History CD-ROM¹

	Number	nber of Respondents			Weeks Working			Not Working			Weeks Missing		
Year	Hisp.	Black	NB/NH	Hisp.	Black	NB/NH	Hisp.	Black	NB/NH	Hisp.	Black	NB/NH	
Males													
1979	766	1277	3051	24.0	18.4	24.1	26.1	31.6	25.9	1.9	2.0	2.0	
1980	707	1212	2897	28.9	22.7	28.3	22.2	28.3	22.8	0.9	1.0	0.9	
1981	868	1440	3323	29.1	23.2	29.8	22.7	28.6	22.0	0.2	0.2	0.2	
1982	935	1539	3614	31.5	24.5	31.5	20.3	27.3	20.3	0.2	0.2	0.2	
1983	945	1545	3658	31.9	24.8	32.8	19.9	27.1	19.0	0.1	0.1	0.2	
1984	943	1535	3577	33.3	27.1	34.8	18.6	24.8	17.1	0.1	0.0	0.1	
1985	912	1419	3040	36.7	31.4	38.7	15.1	20.6	13.3	0.2	0.1	0.1	
1986	886	1386	2965	38.7	33.9	40.4	13.2	18.0	11.5	0.1	0.1	0.1	
1987	848	1362	2906	40.0	35.2	41.9	11.9	16.6	9.9	0.1	0.2	0.3	
1988	850	1377	2926	40.9	36.5	43.1	10.6	15.1	8.6	0.4	0.4	0.3	
1989	878	1386	2932	41.6	37.6	44.2	9.8	13.9	7.4	0.6	0.5	0.3	
1990	856	1365	2891	42.2	37.8	44.6	9.3	13.6	6.9	0.5	0.6	0.6	
1991	871	1345	2255	43.2	37.4	45.2	8.4	14.0	6.2	0.5	0.6	0.6	
1992	876	1353	2252	42.0	36.6	44.6	9.7	15.1	7.2	0.3	0.3	0.1	
1993	859	1365	2240	41.6	36.5	45.1	10.1	15.4	6.7	0.4	0.2	0.2	
1994	848	1345	2218	41.5	37.0	45.5	10.1	14.6	6.3	0.4	0.4	0.2	
1996	810	1312	2153	42.2	38.8	46.5	8.2	11.6	4.4	1.6	1.7	1.1	
1998	837	1301	2155	40.7	38.5	45.6	11.3	13.5	6.4	0.2	0.2	0.0	
					•	Females		•					
1979	781	1244	3054	17.5	14.1	22.5	32.0	35.5	27.4	2.5	2.3	2.1	
1980	744	1201	2930	22.2	17.6	26.5	28.8	33.4	24.7	1.0	1.0	8.0	
1981	878	1401	3328	24.0	19.4	27.6	27.9	32.5	24.3	0.1	0.1	0.1	
1982	947	1515	3573	25.9	20.3	28.9	26.0	31.6	23.0	0.1	0.1	0.1	
1983	962	1519	3592	25.9	20.9	30.1	26.1	30.9	21.8	0.0	0.1	0.0	
1984	954	1513	3547	27.3	23.2	31.3	24.7	28.8	20.7	0.0	0.0	0.0	
1985	909	1424	3190	28.6	26.2	34.2	23.4	25.7	17.8	0.0	0.0	0.0	
1986	879	1404	3135	29.8	28.7	34.6	22.2	23.3	17.3	0.0	0.1	0.0	
1987	862	1388	3119	30.0	30.8	35.2	21.8	21.1	16.7	0.2	0.2	0.2	
1988	848	1365	3099	31.4	31.7	36.0	20.3	20.0	15.8	0.2	0.3	0.2	
1989	889	1384	3136	31.9	32.7	36.5	19.8	19.0	15.2	0.3	0.3	0.3	
1990	873	1354	3097	32.8	32.8	36.3	18.7	18.6	15.2	0.5	0.6	0.5	
1991	891	1354	2302	32.5	33.1	37.3	18.9	18.5	14.3	0.7	0.4	0.3	
1992	896	1346	2293	32.6	33.0	37.5	19.3	18.9	14.4	0.1	0.1	0.1	
1993	901	1357	2289	33.6	33.3	37.4	18.4	18.6	14.5	0.0	0.1	0.1	
1994	875	1355	2250	33.8	33.0	37.7	17.9	18.7	14.1	0.3	0.3	0.2	
1996	847	1330	2184	34.6	35.1	38.3	17.0	16.4	13.4	0.4	0.6	0.4	
1998	864	1344	2220	36.1	37.6	38.5	15.9	14.4	13.5	0.1	0.3	0.0	

Notes: NB/NH denotes non-black non-Hispanic. The average weeks variable was taken directly from the NLSY79 Work History Variable WORKCXX. The missing weeks variable was calculated by the equation (MISSCXX /100) * 52. Weeks not working are the residual from 52 weeks (i.e. 52 - weeks working - weeks missing). Sex and race variables are taken directly from the Work History CD-ROM.

¹ Data for 2000 have been collected but processing was not complete at the printing of this guide. These numbers will be updated in the next edition.